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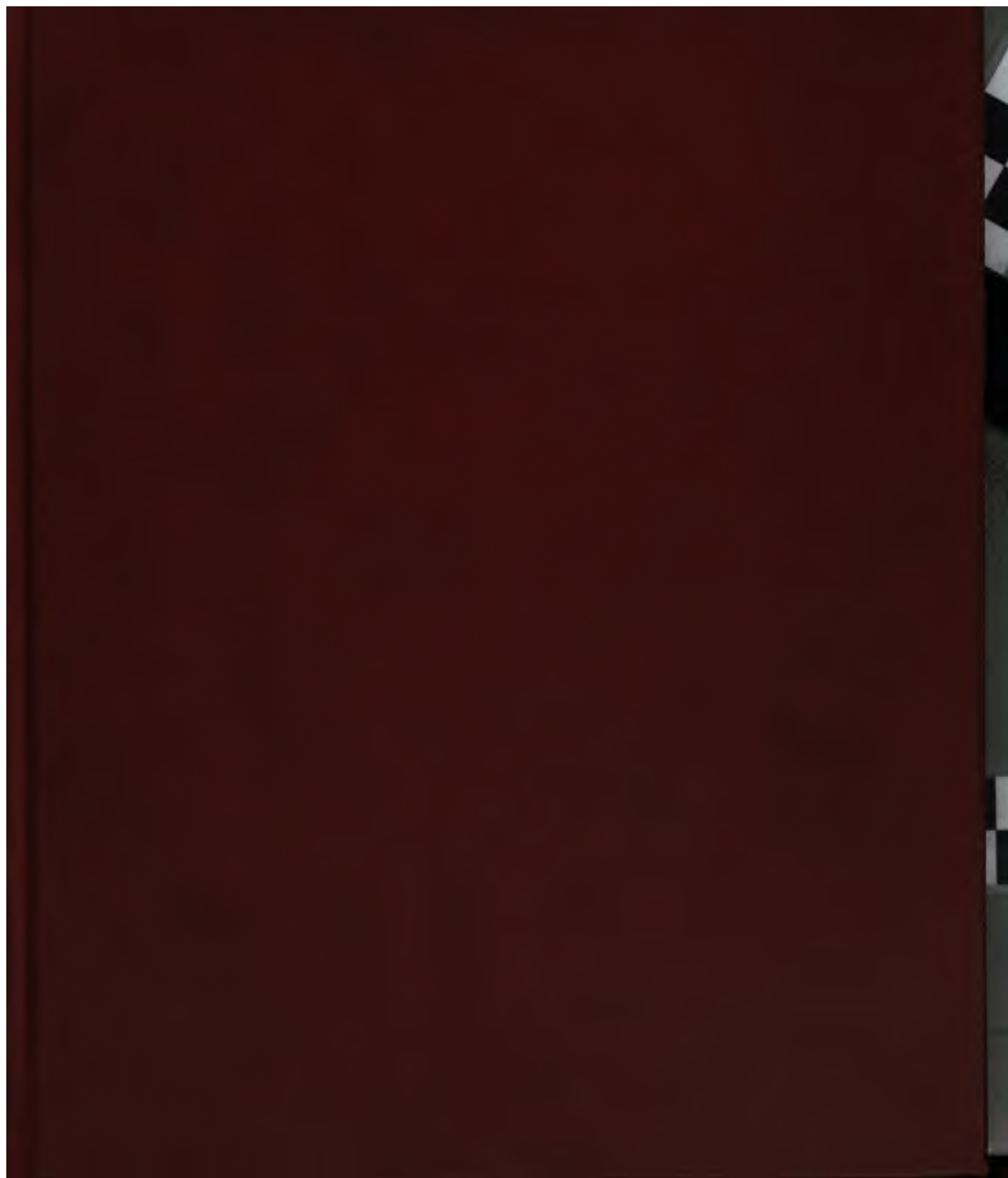
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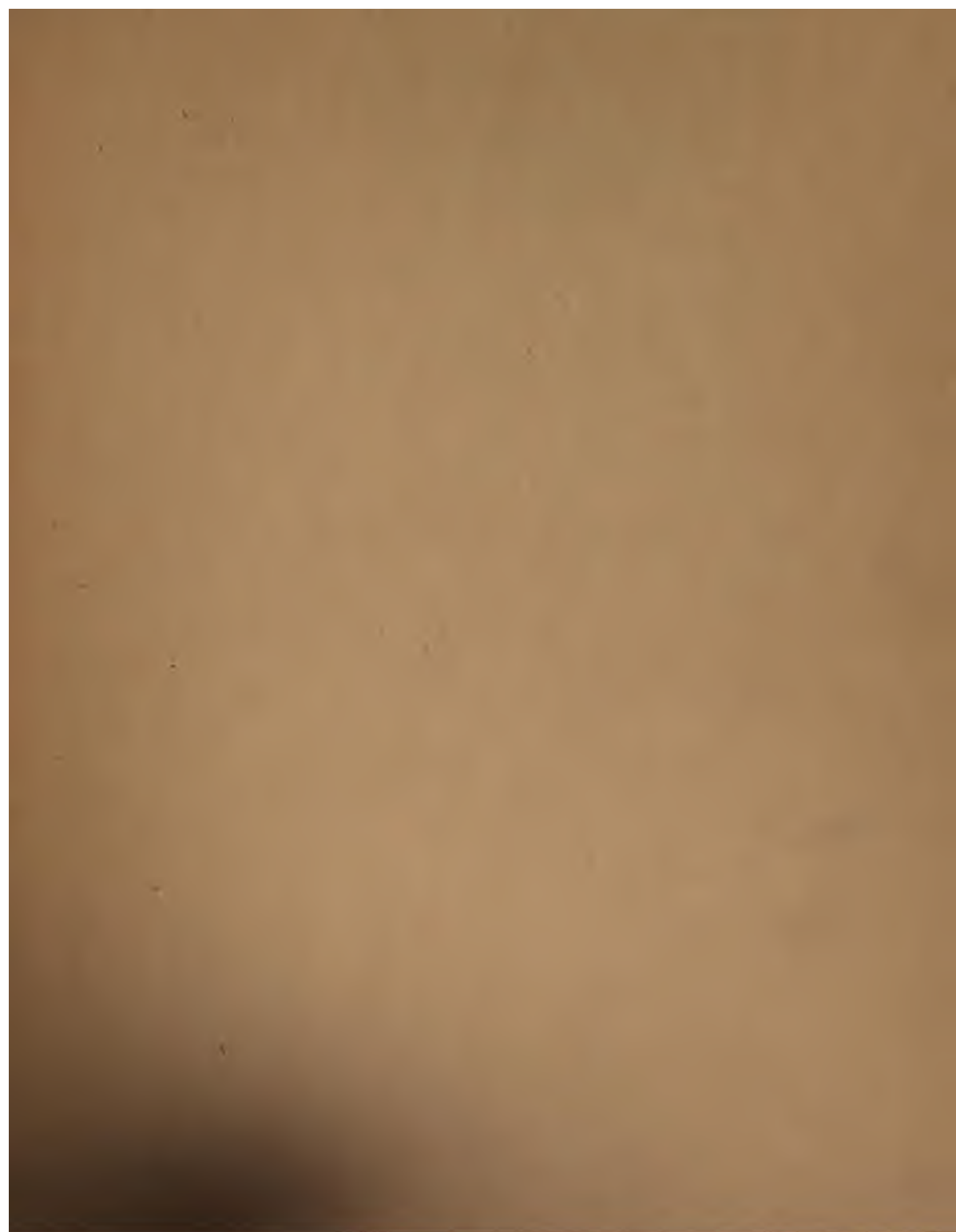
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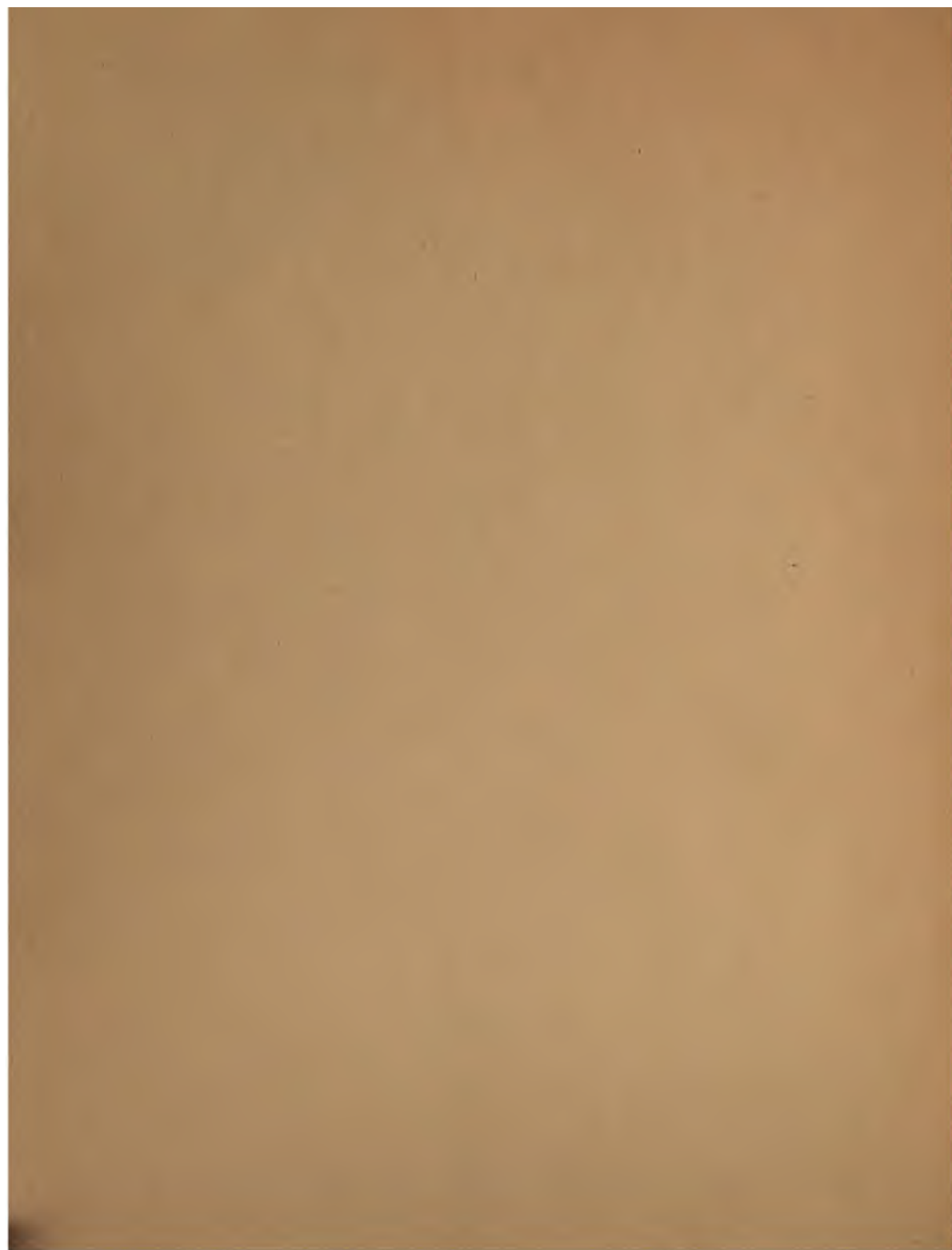
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**THE
INVENTION OF PRINTING.**



THE VIRGIN OF BRUSSELS.

THE
INVENTION OF PRINTING.

A SERIES OF FOUR LECTURES DELIVERED
IN THE LENT TERM OF 1897.

BY THE
REV. CHARLES H. MIDDLETON-WAKE, M.A.,
CHRIST'S COLLEGE, CAMBRIDGE.

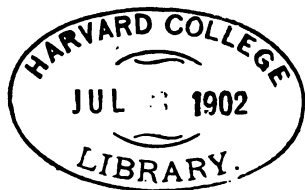
*Appointed by the Library Syndicate "Sandars Reader in Bibliography"
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TO MY READERS.

AS an Introduction or Preface to this printed copy of a series of four Lectures which, on the invitation of the Library Syndicate, I had the pleasure of delivering in Cambridge in the Lent Term of this year, I have decided to place before you an extract from the Will of the late Mr. Samuel Sandars, M.A., Trinity College, founder of what is officially described as *The Sandars Readership in Bibliography*; and which, with the accompanying note, I have received from Mr. Jenkinson, of the University Library.

REPORT OF THE COUNCIL OF THE SENATE ON THE SANDARS BEQUEST, OCTOBER 29, 1894.

The following is the portion of the Codicil of the Will which relates to the Bequest:—

I BEQUEATH to the University of Cambridge in its corporate capacity the sum of £2,000 free of duty And

I direct that this sum be invested and that the Income arising therefrom be paid to a Reader in Bibliography such Reader to be elected in the first instance and on each vacancy by the Vice Chancellor the Master of Trinity College Cambridge when not holding the office of Vice Chancellor and the other persons for the time being composing the Syndicate of the University Library and such Reader may be appointed for such a period as the elective body shall think fit and specify and shall be subject to removal by such elective body at their discretion And I declare that the duty of such Reader shall be to deliver one or more lectures annually or if the elective body shall so determine biennially in some suitable place and on a day and hour to be determined by the Vice Chancellor for the time being that the lecture shall be delivered during Term and shall embrace the subjects of Bibliography Palæography Typography Bookbinding Book Illustration the science of Books and Manuscripts and the Arts relating thereto It is my wish subject to the discretion of the elective body for the time being that the lectures be based on and be illustrated by examples contained in the University Library or the College Libraries at Cambridge and I direct that it be a condition of the tenure of the office of Reader that the Reader deliver a written or printed copy of each lecture to the University Library and also to the British Museum Library And I declare that in all matters relating to the administration of this Bequest

which may have to be determined by the elective body the votes of a majority shall be sufficient to determine the same.

The Bequest was accordingly accepted by Grace of the Senate, November 22, 1894.

The first appointment to the Readership was made for the academical year 1895-1896. In that year Sir Edward Maunde Thompson, Principal Librarian of the British Museum, delivered four Lectures (two in the Lent Term and two in the Easter Term, 1896), illustrated by lantern-slides, on Greek and Latin Paleography; and, in accordance with the conditions attached to the Bequest, deposited a written copy in the University Library, and one in the Library of the British Museum.

For the academical year 1896-1897, the Rev. C. H. Middleton-Wake, M.A., Christ's College, was appointed Reader; and the four Lectures now printed were delivered by him in the Lent Term of 1897. In accordance with the wish of the Founder, these Lectures were illustrated by the exhibition of books from the University Library, among them being some from the valuable collection bequeathed by Mr. Sandars to the University.

F. JENKINSON,

Librarian.

UNIVERSITY LIBRARY, 1897.

I would add that, by permission of the Trustees, my Lectures were delivered in the Fitzwilliam Museum, where I was not only able to exhibit examples of Early Printed Books, but also numerous reproductions from "Saint-Pictures" and Blockbooks, etc.

The subject of my Lectures is one in which I have for some time past taken considerable interest, and I do not forget the kindly attention with which what I said was received by those who formed my audience.

CHARLES H. MIDDLETON-WAKE.

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INVENTION OF PRINTING.

LECTURE I.

DELIVERED FEBRUARY 24, 1897.

IT is somewhat difficult for us who live at the close of the nineteenth century to realize the fact that what is commonly described as *The Invention of Printing*, that is, the art of producing books by means of moveable type, was an art not merely unpractised, but actually unknown, until little more than four hundred and fifty years ago.

To ourselves not only the principal, but even the less important works of early as well as comparatively recent and contemporary authors, are more or less familiar; we fill our shelves not only with modern literature, but with reprints and copies of original or translated works of writers of long past days; we feel that without our books—whether they are in our own cases, or in the richer libraries to which we have access—educated life would be impossible, and yet, until the middle of the fifteenth century, no single

type-printed volume, no pamphlet or broadsheet, no book of any kind or upon any subject, created by means of the printing press and moveable cast or manufactured type, was in existence.

The whole literature of early days was in manuscript, and the extent to which the business of producing written books was carried out, especially in mediæval times, is perhaps insufficiently appreciated. And, when we speak of manuscript, we do not mean the hastily transcribed and too often nearly illegible handwriting of modern days, but manuscript of more or less accurately designed lettering, sometimes, it may be, showing the work of unpractised and unskilful hands, but more frequently evincing a careful rendering of the familiar forms of the several letters of which the wording was composed; and in very many of the more important examples—happily preserved—showing an even artistic elegance and exactness of style, which, when type-printing was introduced, was closely imitated by the clever workmen to whom the manufacture of metal letters was entrusted. The *Scriptorium*, the department in which such work was done, formed a necessary adjunct to every important monastery. In it, from day to day, would be assembled those of the lay or monastic brethren who, for their proficiency in art or literature, had been selected for the task by the head of the religious house; and while some would be engaged in the transcription of early and valuable

manuscripts, others would be employed in designing and completing the ornamental capitals, and the elaborate and often beautiful illustrations or margins which, especially in Missals and Service-books, were to form the decoration of a page. Unfortunately, although a considerable number of the more finely illuminated of these manuscripts have been preserved, and are now regarded as among the most valued treasures of our National, our University, and our College Libraries, we cannot but regret that so many, not of these only, but of manuscripts in which the illuminator had no part, should have perished, some through the carelessness of their former owners, but mostly through the barbarism which, in revolutionary times, occasioned their destruction.

For reference to the sometimes unavoidable, but too frequently wilful destruction of these early works, whether in manuscript or printed from type, see a charming essay by the late Mr. William Blades, entitled "The Enemies of Books." In his first chapter, when writing of the demolition of the monasteries, at the time of the Reformation, as one of the causes by which such deplorable results were brought about, he gives a quotation from the antiquarian Bale, 1587, who tells of the shameful fate of their libraries, and although the passage relates to a more recent time than that to which I am referring, it is no doubt equally descriptive of what had too frequently occurred in earlier days.

1

A greate nombre of them whyche purchased those superstycouse mansyons (*monasteries*) reserved of those librarrye bookes some to serve theyr jakes, some to scoure theyr candelstyckes, and some to rubbe theyr bootes. Some they solde to y^e grossers and sope sellers, and some they sent over see to y^e booke bynders, not in small nombre, but at tymes whole shyppes full, to y^e wonderynge of foren nacyons. Yea y^e Unversytyes of thys realme are not alle clere of thys detestable fact. . . . I knowe a merchant manne whych shall at thys tyme be namelesse, that boughte y^e contentes of two noble lybraryes for forty shyllynge pryce, a shame it is to be spoken. Thys stuffe hathe he occupied in y^e stede of greye paper, by y^e space of more than these ten yeares, and yet he hathe store ynoughe for as manye years to come. A prodygyous example is thys, and to be abhorred of all men whyche love theyr nacyon as they shoulde do. The monkes kepte them undre dust, y^e ydle headed prestes regarded them not, theyre latter owners have most shamefully abused them, and y^e covetouse merchantes have solde them away into foren nacyons for moneye.

I do not know whether the quaint spelling of this record is an exact rendering of the original, with which I have not yet had the opportunity of comparing it, but there can be, unhappily, no question as to the veracity of his statement. Some of the most interesting relics of earlier days have been discovered within the binding or covers of more recent books, others again been extracted from mouldy heaps of parchment, thrown aside into some neglected corner as waste, or used by the economic housewife

to light the kitchen fire, or for "baking pyes." But, apart from this, the acknowledged multiplicity of these manuscripts suggests a very interesting question in regard to their production in the form of books. How was it that, in those earlier byegone days, it never occurred, to one or other of the able and intelligent occupants of the Scriptorium, that not only time might be saved, but that more accurate results might be attained, if some method were invented for the reproduction, not merely of ornamental capitals or decorative margins, but of the text itself? Certainly time was not then of so much value as it has now become; but think what hours, nay what days, it must have taken to complete even a single page of the larger and more perfectly written books in manuscript!

It was not that stamps of wood or metal expressly constructed for the purpose of reproducing designs or lettering were absolutely unknown; on the contrary, the art of engraving, with the direct intention of taking impressions by some process of printing, was practised at a very early date. Jackson and Chatto, in their "History of Wood-Engraving," describe several such stamps to which a very early date may be assigned. Of one of the more recent, though even this belongs to a period before the dawn of the Christian era, they give an illustration. The stamp is of brass, with letters in Roman character engraved in relief and in reverse, so that, when inked and

impressed upon parchment or paper, the letters would be produced in the right direction. It is not known for what purpose this stamp, with the letters L A R, signifying a household god, was intended, but it is supposed that it was for producing an impression upon an amphora or wine-vessel, sealed and set apart on the birth of the heir, to be retained by the family and kept unopened until the young Roman arrived at years of maturity. Frequent references are also made by early writers to some practical process of producing impressions from engraved stamps. Thus, in the book of Ser Marco Polo, written in the last years of the thirteenth century, there are several allusions to printed paper-money in use in Eastern countries. For instance in Book II., Chapter xxiv. (I am quoting from Colonel Yule's second edition of *Marco Polo*, 1875), the author, after relating what he had learned of the life and actions of the great Kublai Kaan, Emperor and Lord of Cathay, and after giving a description of his magnificent palace in the city of Cambulac, the site of the now existing city of Peking, tells us how Kublai established a mint in Cambulac, in which "paper was manufactured from a certain fine bast or skin which lies between the wood and the thick outer bark of the mulberry tree," and "this they make into something resembling sheets of paper, but black." He then goes on to say how certain officials inscribed their names on the pieces of this "paper" which were intended to serve for

current money, "and, when all is duly prepared, the chief officer, deputed by the Kaan, smears the seal entrusted to him with vermilion and impresses it upon the paper, so that the form (*i.e.* the design) of the seal remains upon it printed in red"; further, "with these pieces of paper, made as I have described, the Kaan causes all payments to be made, and makes them pass current over all his kingdoms and provinces, and whithersoever his power and sovereignty extends." Colonel Yule, on page 412, gives a reproduction, on a reduced scale, of one of these notes, and, although he does not suggest the actual or even approximate date when such engraved stamps were first made use of, yet asserts, on sufficient authority, that the issue of paper-money in China "is at least as old as the beginning of the ninth century." There is also sufficient evidence that paper-money was current in Persia towards the close of the thirteenth century, and from the descriptions which have been preserved, and from the extensive circulation of these notes, it is certain that they must have been produced by some process of block-printing. It is true that Marco Polo does not distinctly assert that the Chinese or the Persians invented printing, but his account of paper-money and the reference to its production are at least suggestive.

At about the same time, or early in the fourteenth century, diplomatic or notarial stamps were in use in certain Germanic towns. Jackson and Chatto in their work on wood-engraving have given illustrations

of three of these, the earliest of which may be assigned to the year 1345.*

Early examples of engraved lettering on metal plates executed in the right direction, and therefore not intended to be printed from, are by no means unfrequent. Perhaps the most interesting as well as the best preserved of such engraved metal plates form part of the *Corona lucis* of Aix-la-Chapelle, of which a description is given by my friend Dr. Willshire.† The *Corona lucis*, a chandelier of elaborate construction, was presented to the Cathedral of Aix, by the Emperor Frederic Barbarossa, in or about the year 1165—1170. It is ornamented on the outer rim by a design of sixteen towers, on the bases of which are plates of copper, intagliated or engraved with scenes from the life of Christ. These sixteen plates are fastened with small screws to the Corona and may easily be removed. About forty years ago the Corona was taken down for necessary repairs, and permission was given to work off a limited number of impressions from the copperplates. A set of these is now in the British Museum, and has since been reproduced by the Calcographical Society. On eight of these plates are incised inscriptions in Roman letters, seven in two lines, one in three lines. There is no record of their having been printed from before, but surely, we

* "History of Wood-Engraving," 1839 edition, p. 21.

† "Descriptive Catalogue of Early Prints in the British Museum," Vol. I., pp. 15-30.

may suppose, they would have been so used by the engraver, if only as trial proofs of the character and accuracy of their execution.

That the mediæval goldsmiths, or engravers upon metal for decorative purposes, would have by them the requisite means for producing impressions is almost certain. They must have seen the advantage of taking proofs of their work while it was in hand, and also of preserving these rubbings for future reference or reproduction. The only marvel is that the practice of working off impressions, either for sale or distribution, did not occur to them earlier. The discovery, as M. Hymans contends, was ready to their hand, and yet there is no existing evidence, at least in northern towns, that such impressions were created until a comparatively recent period ; and this is the more remarkable in that there is reason to believe that, in or about the time when the *Corona lucis* was executed, incised blocks, whether of wood or metal, were employed for the direct purpose of producing ornamental imprints, not on vellum or paper, but on the smooth surface of silk or taffeta or some such fabric. Examples of work of this character appeared in the Herr Weigel Collection, and several facsimiles are given in his large Illustrated Catalogue. Among the earliest was a portion of a band of taffeta, of a reddish brown colour, on which had been impressed an ornamental device in the form of the letter S, which has been assigned to the twelfth century. Of more recent

date, possibly of the fourteenth century, and of special interest as showing that the production of such ornamental work was continuous, were two examples, German in character, one representing the Crucifixion, with the Virgin Mother and St. John, the other the Virgin with the Holy Infant in her arms, seated within a Gothic tabernacle, with figures on either side, and below, also impressed from the engraved block, the name **M A R I A**.

An endeavour to prove the early existence of a special form of engraving, for the direct purpose of producing impressions upon paper, was made by M. Henri Delaborde in a paper which appeared in the *Gazette des Beaux-Arts* in March 1869. He had in that year, in his capacity as *Conservateur*, purchased for the Print Department of the Imperial Library at Paris a Latin manuscript containing, towards the middle of the volume, two prints engraved in what we call the "dotted manner," *manière criblée*. He noticed certain dates in the manuscript, and observed that the engravings had been printed upon the pages before the accompanying text had been inscribed; lines of manuscript having been written around each print, showing that the impressions had been taken before the addition of the handwriting. After careful investigation, he concluded that the date of the manuscript should correspond to some year between 1394 and 1413, probably he thought in 1406. If this date could be satisfactorily proved, the execution

of the two prints must have been effected earlier, and have preceded, by some twelve to twenty years, the first dated engravings to which we shall shortly refer. Unfortunately, perhaps by a *lapsus calami*, the date 1413 in the manuscript reads 1473; and what is possibly suggestive of a later date than 1413, one of these two *criblée* prints appears again, as one of a set of eight prints of a "Passion" in the Weigel Collection, with typographic text, of or about the year 1460. I have not seen the originals, and therefore cannot express an opinion as to the probable date of their execution, but am disposed to assign all the prints executed in this peculiar manner, and several examples have been preserved, to an even later period. The earliest which bears a date is a "Saint Bernardinus" of which a reproduction is given in Ottley's "History of Printing," p. 194. Below are five lines of engraved text, ending with a date, which has, however, been differently read: one author says it is 1475; Ottley reads it 1454. We cannot say, without comparing it with the original, whether the reproduction is an absolutely accurate facsimile, but the date in Ottley's reproduction is certainly 1454; *

* Saint Bernardin, who died in 1444, was canonized in 1450. In 1443, preaching on the steps of the Church of Saint Petronius in Bologna, he so forcibly denounced the evils of card-playing and gambling that his hearers made a fire in the square and threw their cards into it. On the remonstrance of the card-makers, who complained that they would be impoverished by the loss of their trade, the saint took a tablet, and drew upon it the figure of the radiant sun surrounding the sacred initials I.H.S., and exhorted the card-makers to imitate the device. This is

which means, if the print is correctly copied, that the work was not executed until after the middle of the fifteenth century.

Two of the largest of these "dotted prints" are in Mr. Huth's collection, and have been facsimiled by Dr. Willshire for the second edition of his "Introduction," 1877, Vol. II. One is an indulgence representing the "Mass of St. Gregory," the other is a "Death of the Virgin"; they have no date, but their execution may be placed in or about 1475.

Permit me to add a few words as to the probable origin of these dotted prints. Some time after the introduction of the illustrated works known as Helglein and Blockbooks, when they had become to a certain extent popular, and a demand for them had been created, the goldsmith-engravers saw the advantage of creating printed impressions from work which they had executed for purely decorative purposes, such as ornamental metal caskets for the preservation of relics, or for the "Pax," the chased or enamelled metal plate or paten kissed by ecclesiastics taking part in the service of Communion. They would then carry on their process for the direct purpose of producing engravings, in the hope that the peculiar character of the work might be more or less attractive and repay them for their labour. Their success cannot,

the scene represented in the engraving. The legend further records how they obeyed his directions, and made much profit by their new adventure. (Chatto on "Playing Cards," p. 90.)

however, have been very satisfactory, since, before the end of the century, the practice was discontinued. As to the manner of their execution, a very interesting paper by Mr. S. R. Koehler was issued in 1892 by the Trustees of the United States National Museum; he decides, after long investigation and comparison with recent work, that

The so-called dotted prints are white-line engravings intended for relief-printing, that they were executed with the graver, and in some cases with punches on metal (which does not exclude the possibility that similar work may have been done on wood with the knife now and then, in the spirit of imitation), and that, arguing from the means used and the love of ornamentation displayed in them, their originators were goldsmiths.

My own conclusion with respect to these "dotted prints" is that, however they may have been executed and whether on woodblocks or on metal, they do not come into our subject at all, that they were produced not before, but after the invention of type-printing; but as they have been regarded as one of the steps which led to the invention, we cannot pass them by without remark.

As to the actual date when the practice of engraving metal plates or woodblocks, for the direct purpose of producing impressions upon vellum or upon paper, originated in Europe, we have no certain knowledge. Passavant and others tell of printed impressions from woodblocks, with or without lettering,

which they had met with in their researches, and which might reasonably be assigned to the later years of the fourteenth century. They affirm that the character of the work, and the general treatment of the designs, fully support their conclusions; but, as no one of the prints they have described bears a date, the evidence is necessarily incomplete, and the exact period to which they should be assigned must remain a matter of opinion.

Before we invite your attention to certain classes of engraved work executed for the direct purpose of producing impressions, and to which an actual date may be assigned, we must say a few words respecting the manufacture of Playing Cards, since some writers have contended that their introduction into Europe, in or about the year 1350, and their general use during the later years of the fourteenth century, must necessarily imply that they were produced by some simple and inexpensive method such as wood-engraving. Whether, as some authorities declare, playing cards were known in Germany as early as the year 1300, and in Italy in the early years of the fourteenth century; whether their invention occurred in Spain, and they were in use in that country before 1330, is still undecided, as is also the method of their production. The first distinct mention of their origin in any printed book appears in "Ingold. Das Guldin Spil," a work published by Zainer at Augsburg in 1472, but the author gives no account as to the manner in which

they were produced. Careful investigation has, however, established the fact that the practice of printing playing cards from engraved blocks or metal plates did not commence until some years after the date to which we assign the invention of type-printing. Until that time they had been produced by handwork, or more commonly by the *stencil*: *i.e.* the outlines of the figure to be represented would be cut out in a thin sheet of metal, parchment, or pasteboard; this was then laid upon the card, and a brush charged with colour passed over it, the colour thus entering into the cut-out lines imparting the design to the material beneath. A little consideration will show that the lines and figures thus incised cannot have been entirely complete; some portions of the outlines must have been left to preserve their continuity. This is apparent in the earliest set of cards not drawn by hand of which we have any knowledge, and which, as described by Chatto, are in the British Museum, and are assigned to about 1440, but are probably a few years later. Whatever may be their absolute date, they undoubtedly preceded playing cards produced by any xylographic process, which was not, we think, resorted to before the years 1470 to 1480.

It was not until the later years of the fourteenth century that the practice originated of engraving woodblocks or metal plates for the direct purpose of producing impressions. In or about that time

illustrations of sacred subjects, popularly known as *Helgen* or *Helglein* a corruption of *Heiligen*, or *Little Saints* as distinguished from the larger images or pictures placed in churches, were produced for the instruction of the people; and there is no doubt they were the work of engravers connected with convents or religious houses. Several of these prints, though not very many, have been preserved; they were printed simply as fly-sheets, not placed together to form books, and represented events connected with our Lord's Passion, scenes from the life of the Blessed Virgin, or pictures of martyrs and saints; and in these were frequently introduced a few words of prayer or pious ejaculations, not written, but printed, as were the designs, from the engraved woodblock. Those who executed these *Helglein* were known as *Formschneiders*, a term which, in its earliest application, implied not the engraver upon woodblocks produced for the purpose of printing impressions, but distinguished the wood-carver who created the decorative panelling of altar-screens or of images of saints, and was now used also for those whom we should describe as wood-engravers. The term frequently appears in the public registers of German towns, as, for instance, in Ulm, where a *Formschneider* named Ulrich is entered in 1398; the title appears again as late as 1441—1442, showing that the term was a recognized one.

The earliest example of these religious prints

bearing a date is known as "The Virgin of Brussels," now preserved among the treasures of the Brussels Print Room (Plate I.). It was in the year 1844 that an inhabitant of Malines, in the act of breaking up an old coffer which contained some mouldy parchments, found an antique-looking print pasted inside the lid. M. de Notor, who happened to be present, carefully removing the fragments, for the print was in a sadly dilapidated state, succeeded in putting them skilfully together. Soon afterwards, when the discovery became known, the print, after passing through various hands, was purchased for the Royal Library at Brussels for five hundred francs. Unfortunately it is in very poor condition, the lower part having been torn away; it measures 16 inches high, by about 10½ inches wide. The Blessed Virgin is represented seated in a garden enclosed within a palisade, the Holy Infant resting upon her knees. She is accompanied by four saints, viz. St. Catharine, St. Dorothea, St. Barbara, and St. Margaret, and with each saint appears a scroll, bearing her name in Gothic lettering. This lettering is not handwritten or printed from type, but is impressed from letters which had been engraved, of course in reverse, upon the actual block used for the composition. Of this print two facsimiles, a little less than the original, were issued in 1864, in the *Documents Iconographiques* published at Brussels, together with an essay by M. Ruelens of the Royal Print Room.

There has been much controversy as to the accuracy of the date which appears upon this print, and which we read 1418.* It is placed upon the upper bar of the gate which fronts the palisade. The print, even since its discovery, has been badly treated, some foolish or inconsiderate owner having gone over the numerals with a lead pencil; and, beside being in a dilapidated condition, it is faded and discoloured; still, much can be discovered by a practised eye, aided with a powerful lens. Some twenty or more years ago when I was engaged in a prolonged and careful study of early wood and metal engravings, I had the opportunity of examining this print. I may claim that I approached the question with absolutely unbiassed mind; I had carefully considered everything that had been suggested on either side, and every possible facility for comparison and examination was afforded me——

And I finally decided not only that the date 1418 is that which appears upon the impression, but that the character both of the design and of the execution was of that period, and not, as had been asserted by certain eminent authorities, of a period between 1460 and 1470, *i.e.* of about fifty years later; and I should add that this conclusion entirely agreed with that expressed by M. Ruelens, and was also in accordance with that of M. Hymans, the present Keeper of the Prints.

✓ * For account of the controversy see Dr. Willshire's "Introduction to Ancient Prints," Vol. I., pp. 167-173.



THE BUXHEIM ST. CHRISTOPHER.

More recently, in 1889, I find that the accuracy of the date has been again questioned by Mr. W. J. Linton in his very interesting work on wood-engraving. He reads the date MCCCC. XLIII., *i.e.* he reads XL. for XV., 40 for 15. Mr. Linton founds his arguments first on the style of the composition, then on the insufficiency of evidence as to the condition of the print when it was first discovered, and lastly on "the too noticeable prominence of the date." With all possible respect, I fail to see how any one of his arguments can disprove our conclusion as to the actual date, since not only is its "noticeable prominence" somewhat immaterial, and may be purely accidental—equally prominent outlines occurring in other parts of the sadly damaged impression—but the lettering of the date resembles that of the legends on the scrolls; while the manner of composition and of the execution of the work has an undoubted similarity to that of other early xylographs of the period. One does not willingly reject the decision of so eminent an authority as Mr. Linton in connection with a print, but I must adhere to my conclusion that we should not only read the date 1418, but must also accept that as the date of the execution of the print.

The second of these early religious prints which bears a date is the wood-engraving known as "The Buxheim St. Christopher" (Plate II.). The first who described this "St. Christopher" was Heinecken, then Keeper of the Prints in the Museum at Dresden.

In his well-known work on early prints, published simultaneously at Leipzig and Vienna in 1771, he says: "Two years ago (*i.e.* 1769) I discovered in the Chartreuse at Buxheim near Memminghem, one of our most ancient convents in Germany, a figure of St. Christopher carrying the Infant Jesus through the sea; before him is the hermit, who raises his lanthorn to light him, and behind the saint is a peasant carrying a sack, with his back to the spectator and ascending a hill. The print is of folio size, engraved on wood, and illuminated in the manner of our playing cards."

The print was found pasted within the covers of an old book, a manuscript entitled "Laus Virginis" and dated 1417. It was on the right-hand side of the binding, and within the left side was another woodcut, an "Angelic Salutation," of same dimensions as the "St. Christopher."

Both the book and the prints passed into the possession of the Earl Spencer, and recently into the hands of Mrs. Rylands. A facsimile in outline and of same dimensions was reproduced by Ottley, to illustrate his "Inquiry into the Origin of Printing."

Below the composition, within a margin, are two lines of text, with a date: the text not printed by moveable type, but engraved on the original block; the lines in rhythmical Latin, or what is known as Leonine verse:—

Cristofori faciem die quacumq, (que) tueris
Illa nempe die morte mala non morieris.

The second line is followed by the date : Millefimo cccc. xx. tercio. The lines, as translated in Chatto, read :—

Each day that thou the likeness of St. Christopher shall see,
That day no fearful form of death shall make an end of thee ;

and the date is 1423.

I have referred to the animated discussion which has arisen as to the accuracy of the date 1418 on the Brussels print. The question whether the date, 1423, which appears below the "St. Christopher" is genuine or has been tampered with—whether it refers to the execution of the print, or to some earlier legend connected with the saint—has been even more freely discussed. Still further, one writer, Mr. H. F. Holt, in a paper read before the Archæological Institute in 1864, and again in an article contributed to *Notes and Queries* in 1868, affirms that the impression was taken off in "printer's ink"—a vehicle unknown in 1423—and also asserts that the impression was worked off by means of the printing press, whereas, at the date assigned, the printing press had not been invented. He also contends that the paper on which the "St. Christopher" is printed is identical with that used by Schoengauer, and also by Albert Dürer, between the years 1480 and 1500, a paper which bears the well-known watermark of the period, the bull's head with upright line rising between the horns surmounted by a flower ; and finally

ventures to decide that the composition was the work of no unknown artist, but was by Albert Dürer himself, and was executed by him at Colmar in 1493, that would be seventy years later than the date which, as we read it, is impressed upon the print. Mr. Holt, in continuation of his argument, quotes Koning, who in 1819 boldly declared that the date which appears in the legend has been tampered with, and should be read 1473. A little later Pinkerton entered the arena, and decided that the date should be read 1460. Of course the decision of such authorities must be received with respectful consideration; but it is interesting to learn, and that from an after acknowledgement of Mr. Holt himself, that, at the time they wrote, no one of these distinguished critics had even seen the print; and further, that when he afterwards had the opportunity of examining it, in Lord Spencer's collection, and had satisfied himself that the date had not been tampered with, he still adhered to his decision as to the evidence afforded by the printer's ink and the watermark, and believed that the date did not refer to the execution of the print, but to some early legend relating to the history of the saint. The whole question has been exhaustively treated by Dr. Willshire, who shows, on the authority of Weigel, that "a dark-coloured matter similar to printer's ink" was used in those early days for taking impressions; while the argument founded on

the bull's head watermark is entirely fallacious, since the bull's head (which may or may not be found in the paper, and as the woodcut is pasted down to the binding of a book, this is difficult to decide) was a watermark in use some years before 1423—was, in fact, the trade-mark of a family at Ravensburg, who were known as manufacturers of linen paper as early as the beginning of the previous century.

As we have already said, the impression is hand-coloured; Chatto considers that this colour was laid on by the *stencil*, a process we have described in speaking of playing cards, but this is only a suggestion. For prints such as the "Brussels Virgin" and the "St. Christopher," hand-colouring would be not only simpler, but more effective; the work could be done in the Scriptorium by younger or less practised hands under the direction of their instructor, and, as numerous copies would be required for distribution, we may reasonably assume that they would be completed with as little delay as possible.

Another of these Helglein was discovered within the binding of the same manuscript, "Laus Virginis," representing the "Angelic Salutation." Although it does not bear a date, it undoubtedly belongs to the same period as the "St. Christopher," and was also intended to be completed in colour, as is evident from the fact that a part of the breast of the kneeling Virgin appears unclothed, the inner dress being incomplete, to be afterwards added by the brush. This

"Angelic Salutation," as well as the "St. Christopher," passed into the Spencer Collection.*

A facsimile of another example of these early Helglein appears in the *Documents Iconographiques*, with description by Ruelens. It is known as "The Virgin of the Berlin Cabinet" (Plate III.), and, though it does not bear a date, the character of the composition and the peculiarities of execution justify our contention that it was designed and engraved by the same hands as the "St. Christopher" and as "The Virgin of Brussels." There is, however, in this print a distinctive variation in the shape and character of the letters which constitute the legends introduced in the composition. M. Ruelens, who first called attention to this variation, suggests that the lettering shows the hand of another engraver; but that does not, in our opinion, militate against the assignment of the print to the assumed date, 1418—1423. It is quite true also that we may recognize in this lettering a certain resemblance to that which appears in the blockbook known as the "*Speculum Humanæ*," which was produced some twenty years later, but this resemblance does not really affect the actual date of its execution. We must not overlook the fact that all early lettering, whether impressed from the incised woodblock, as in the prints we are considering, or whether, as later on, stamped by means

* A reduced copy of this "Angelic Salutation" appears in Jackson's treatise on Wood-Engraving, 1839 edition, page 64.



THE VIRGIN OF THE BERLIN CABINET.

of moveable type, was in close imitation of the forms of lettering used in manuscript. Those manuscripts varied in character of execution, showing the work of the different hands employed upon them, and therefore the fact that the xylographic lettering introduced on the scrolls in "The Virgin of the Berlin Cabinet" is more accurate in form than the letters imprinted with the "Brussels Virgin," and the "St. Christopher," only shows that the execution of these legends was entrusted to a more skilful hand, or that he had before him a more accurately written manuscript.

Of greater interest to ourselves, and, judging from the character of the composition, of about the same date, say the first quarter of the fifteenth century, is a religious print known as an "Ecce Homo." This example of the early Helglein is smaller than those we have already described, measuring only $4\frac{3}{4}$ inches high by $2\frac{1}{2}$ inches wide. It represents, in three-quarter length, the Body of our Lord upon the Cross, the blood gushing from His pierced side. Above is an inscription, partly in Greek characters, O BACIAEVVS, followed by letters not easily decipherable, but reading *hora* 3 a.* Below the com-

* The late Henry Bradshaw (see "Collected Papers," 1889, p. 96) writes, in 1867, respecting this inscription: "Mr. E. M. Thompson, of the British Museum, suggested to me '*hora* 3*' as the reading which Otley was unable to decipher; and I have no hesitation in accepting it. The words in St. Mark are (xv. 25, 26) *Erat autem hora tertia; et crucifixerunt eum. Et erat titulus causæ ejus inscriptus: Rex Judæorum* (ὁ βασιλεὺς τῶν Ἰουδαίων)."

position are six lines of text, comprising four verses of rhyming English, granting a long indulgence—

To thym that befor this fygur on their knees,
Deuoutly say v. paternoster & v. Auees.

The *th* is closely imitated from the Saxon character denoting that combination of letters, exactly as it is found in English manuscripts of the end of the fourteenth and early fifteenth century. The impression was taken off in a brown tint by friction, and is partially hand-coloured. The language in which the verses are given might seem to imply an English origin for the print, but this is only suggestive ; there was at that time frequent communication between England and Holland, especially among members of religious houses, the more educated migrating from one to another monastery, and finding congenial occupation in the Scriptorium.

Another "saint-picture" formerly in the Spencer Collection, and of which an illustration is given in Jackson and Chatto's treatise on wood-engraving, represents "Saint Brigita," a daughter of the royal house of Sweden, a favourite saint in Germany, where her memory was preserved as the foundress of more than one religious sisterhood. Born in 1302, towards the close of her life, inspired by a vision of the Blessed Virgin and the Holy Child, she is said to have undertaken a pilgrimage to Jerusalem, and returning by Rome died there in 1373. She is

pictured as seated at a desk, writing an account of the vision which had been vouchsafed to her, and which, surrounded by a nimbus of cloud, is introduced in the upper left of the print; behind her are suspended her pilgrim's hat, her staff and scrip, and, on a shield above, the letters S. P. Q. R., denoting the city, Rome, where she ended her life. The crown and the lion on the shield—the arms of Sweden—refer to her royal dignity. The lettering of the two inscriptions printed from the block is in the ordinary manuscript character of that period, *i.e.* of about the second or third decade of the fifteenth century. One of these inscriptions from our point of view has a special interest, since it follows the colloquial German of the time, reading "*o brigita bit got fur uns*" (O Brigita, pray to God for us); the other, on the lower left, in Latin contraction, *m ichrs*, is the designation of the Virgin, *Mater Iesu Christi*.

There has been much discussion both as to the date and also as to the nationality of this print. The wording of the invocation, and the accepted tradition as to the localities in which Saint Brigita devoted herself to religious work, have been regarded as affording at least presumptive evidence of German origin; while the execution is assigned to a date not later than the close of the fourteenth century, and this quite independently of the natural conclusion that such emblematic representation of her saintly

life would have been produced, soon after her demise, to perpetuate her memory.

It may perhaps occur to some of my hearers that we are devoting too much of our limited time to the consideration of these fourteenth or early fifteenth century prints, which, it may be thought, have only an indirect bearing upon the subject of our lecture, *i.e.* the steps which preceded and led onwards to the introduction of book-printing by means of moveable type. But I have a special purpose in inviting your attention to these varied examples of designs, with accompanying lettering, impressed from engraved blocks. There has been, as you know, much animated discussion as to where, and by whom, and under what influences, type-printing was "invented." Towards the solution of this question the production of actual evidence appears to be impossible; we have therefore to rely upon what we may regard as reasonable inference, and I would endeavour to place before you whatever conclusions may be attained by careful investigation, even although they may not at first sight appear to have any special bearing upon our subject.

As I have already said, we may regard the production of these saint-pictures, or Helglein, as an early and important step towards the invention of type-printing. Our question now is, where did they originate?

A well-known writer on early printing and early

engraving, whose name we must always refer to with respect, William Young Ottley, in describing the "St. Christopher" and the "Angelic Salutation," suggests that possibly they were not of Northern but of Venetian origin.* He founds his assumption on the character and arrangement of their composition, and, referring especially to the "Angelic Salutation," discovers in the composition the manner of Giotto di Bondone and his school—apparent "in the simplicity and lightness of the architectural detail, with its unornamented circular arches"—and still more, in the "graceful attitude of the Virgin," and remarks that her drapery "has none of the angular sharpness so common in the productions of the early German school, but is divided into a few easy folds by lines of gentle curvature"; and further, he reminds us that the monastery of Buxheim, where these two prints, the "St. Christopher" and the "Angelic Salutation," were discovered, is at no great distance from Augsburg, a city which had long been the constant resort of Venetian merchants, and from whence they carried on a considerable trade with Southern Germany; and he concludes that a print of this age being found in Germany by no means proves that it is of German manufacture, but may, of course, have been introduced by Venetian merchants.

To what extent this recognized similarity in character between the works of the school of Giotto di

* Ottley, "Invention of Printing," pp. 187-8.

Bondone, and the saint-picture known as the "Angelic Salutation," may be accepted as evidence of common origin must remain a matter of opinion. I have not myself had the opportunity of examining the original of this print—I only know it by the reduced outline copy in Jackson and Chatto, and by the facsimile of a part of the impression which appears in the "Bibliotheca Spenceriana" of Dibdin;* but, with these, numerous outline copies and photographs of the works of Giotto and his school are available for comparison, and while I fully appreciate the higher artistic manner of the "Salutation" over the ordinary Helglein, and over the designs in the blockbooks which succeeded them, I fail to recognize that predominant Italian influence on which Ottley would establish his conclusions, and, with all deference, do not hesitate to assign this especial print, as I would the others, to the Northern rather than to the Italian schools.

But we have a further reason for hesitation in accepting the opinion put forward by Ottley. It has been suggested by Chatto that he was not altogether unbiassed in his decision, and in support of this he refers to a legend which had been adopted by Ottley, and, if accepted, must have entirely refuted all recent arguments as to the origin of wood-engraving and the invention of printing.

It is a legend which has been long known to

* Dibdin, Vol. I., pp. ii, iii.

bibliophiles as "The Story of the Cunios," and was first related by Papillon, a Parisian author and engraver, who in 1776 introduced it into his published work on the "History and Practice of Engraving."

It is to the effect that the art of engraving, both for illustration and text, was first discovered by two young people, Alexander and Isabella Cunio, living under their father's roof at Ravenna, in the days of Pope Honorius IV., *i.e.* A.D. 1284 to 1287. He tells us that these intelligent children (they were twins and under sixteen years of age) composed and printed a work on "the great and magnanimous Macedonian king, the courageous and valiant Alexander." The book consisted of a series of illustrated pages, to which was prefixed an ornamental title-page. A description is worth nothing unless it is accurate, so he indexes the pictured scenes; all he declares to be named and signed by both designer and engraver, as, for instance, upon the first, *Isabel Cunio. pinx. et sculp.* He then remarks on the character and rude engraving of the lettering, the quality of the paper, and "the ancient and Gothic binding"; and records how the volume, just as it then appeared, had been presented to the grandfather of its thrice-fortunate owner by Count Cunio himself, the actual parent of the intelligent twins to whom this priceless treasure owed its existence.

More surprising, I think, than even this "Story of

the Cunios" has been its almost universal acceptance by contemporary and even by more recent authorities! The Abbé Zani, of whom a portrait and eulogistic memoir appear in Duchesne's "Catalogue of Nielli," not only adopts the legend, but suggests that this production of the youthful Cunios might yet be discovered among the incunabula in the library of the Vatican. (I have myself spent many pleasant days among the prints and the rare and early books in that collection, but have not had the good fortune to meet with this precious volume.) Mr. Singer, in his "Researches into the History of Playing Cards," expresses his belief in Papillon's tale; M. Berjeau, who edited the reproductions of some of the early blockbooks, accepted it without reservation; while Ottley, to whose opinion we have referred, and whom we regard as the highest of these authorities, says that "in all probability the romantic story of the Cunios is, in the main, correct."

And then Humphreys, author of the "History of the Art of Printing," who at first rejected the legend, was converted into belief by a letter he had received from "a well-known bibliophile of Moscow," who assured him that seven of the eight illustrated pages described by Papillon had been recently discovered—nay, more, that he himself had seen them in the hands of an antiquary and bookseller in Nuremburg.

Alas! what a misfortune that Mr. Humphreys' correspondent, the "well-known bibliophile of

Moscow," should not at once have secured a work of which no second copy had ever been recorded. What a loss to the whole book-loving world that such a volume should again have disappeared! Think of a book, with illustrations and xylographic text, produced one hundred and forty years or more before the first known blockbook—a book containing woodcuts, and printed at Ravenna, preceding by nearly two hundred years the "Meditationes" of Cardinal Torquemada, which we had erroneously imagined was the first illustrated work printed in Italy; issued with a title-page, an innovation in construction which did not again occur until 1470, when the idea was adopted by Ther Hoenen, a printer at Cologne, in his "Sermo ad Populum";* the whole impressed, as Papillon carefully records, on a kind of paper which, unless perchance a parcel of it was provided by Marco Polo and brought by him from the distant East, was unknown in Europe until a much later date; while the binding, constructed, as Papillon explains, of "thin tablets of wood covered with leather, and ornamented with flowered compartments, stamped and marked with an iron a little warmed, and without any gilding," has an equal interest, since it accurately describes a form of bookbinding which we supposed was not even designed, still less practised, until about the

* Not described by Hain. See Mr. A. Pollard's "Early Illustrated Books," p. 32, for reproduction of the title-page.

middle of the fifteenth century, *i.e.* about two hundred years afterwards.

But the "Story of the Cunios," as detailed at length by Chatto, would be incomplete unless some information were furnished respecting Papillon himself. He was evidently a man of some intelligence, but, at least in his earlier days, can have had no special knowledge of engraved work beyond what he might possibly acquire while working under his father, a maker of decorative wall-papers. From his own account, when he published this veracious history, his original memoranda had been laid aside for five-and-thirty years, and the discovery he had made so long before had been until then entirely forgotten. He may have repeated the tale in all good faith, accepting the assurances of his long departed informant as to origin and date of this original essay in printing, while utterly unconscious of its improbability; and we are the more disposed to pardon his inaccuracy when we learn that, even from early youth, he had been the occasional victim of mental hallucination, and that only a year after he had recovered and printed these forgotten memoranda, which no one but himself appears ever to have seen—not even his contemporary Heineken, who endeavoured to investigate the subject—he had a fit of decided insanity, and was for some time incarcerated in a madhouse.

Dismissing then, as we may well do, this "Story of the Cunios," we may reasonably accept the

suggestion of Chatto that the decision of Ottley, as also of other writers who so readily accepted the legend put forward by Papillon, cannot be entirely relied upon, more especially when we come to critical questions relating to the typical character and the origin of the early engravings. As I have already said, I fail to recognize that predominant Italian influence which Ottley believes to be apparent in the "Angelic Salutation." There is no doubt an occasional similarity in the character and design of the illuminations of the Southern, and in the early engravings which we assign to the Northern schools, sometimes sufficiently distinctive to warrant the assumption that the work may have been executed in Italy ; but this may be accounted for by the very natural presumption that illuminated Missals and Service-books, for which in those days there was an increasing demand, were not entirely confined to the localities in which they were created, but found their way into the churches and religious houses of other countries, and perhaps served as models for pictorial work in some far distant Scriptorium.

A very important advance, leading to the invention of type-printing, was made in the production of what are now generally known as the "Blockbooks." These comprised a series of xylographic illustrations of sacred subjects, accompanied by appropriate or descriptive text, to be issued, not as the Helglein in single

sheets, but in successive sheets to be placed together, and issued in book or pamphlet form. The Helglein had by this time become more or less popular, and it was no doubt to meet an increasing demand that these interesting volumes were introduced.

As to the titles by which these books are known, and as to the order in which the first editions appeared, there is much diversity of opinion, as also respecting the dates to which they should be assigned. The late Mr. George Bullen, the well-known and respected Keeper of the Printed Books in the British Museum, in his Preface to a volume of reproductions of the pages of the blockbook known as the "Ars Moriendi," issued by the Holbein Society in 1881, says that the blockbook entitled the "Biblia Pauperum" is generally supposed to have been the earliest, and thinks that it may have been printed in Holland between 1430 and 1440; Berjeau believes that it was produced *circa* 1420; Dibdin gives the priority to the "Ars Memorandi," assigning it to about the year 1415; Chatto suggests the "Apocalypse" as the earliest, and in this he is supported by Passavant, who, however, does not allow that any one of these blockbooks made its appearance before the second half of the fifteenth century. We have already recorded the decision of Mr. Holt in regard to the date and also to the probable engraver of the "Saint Christopher"; he is equally positive in his assertions as to the origin and year of production of the

blockbooks. He gives the priority to the "Biblia Pauperum," but contends that the very idea of this work was not even contemplated before 1483, and that it was not completed and issued until two years later, that is, until 1485; and, as before, he attributes not only the designs but also the execution of the wood-engravings in the "Biblia Pauperum," as also in two other of the blockbooks, viz. the "Canticum Canticorum" and the "Speculum Humanæ," to Albert Dürer, who, he says, "to avoid the expense of using metal type, himself engraved on the woodblocks both the text and the illustration." In answer to this we may quote the opinion of Thausing, who declares in his "Life of Dürer" (Vol. I., p. 259) "there is no ground for the assumption that Dürer himself handled the knife, or prepared the blocks for printing"; and further, "the technical work of wood-cutting depends so greatly upon constant practice that even the most expert draughtsman or painter who only occasionally handled the knife—a very different thing from the graver or burin—could never have equalled, much less surpassed, the professional wood-engraver"; and what confirms his conclusion is the fact that, in the first series of woodcuts which bears Dürer's initials and which appeared in 1498, we recognize the hand of at least two engravers. So again, in the "Little Passion" of 1511, careful comparison enables us to distinguish the workmanship of three if not four different engravers; while in reply to Mr. Holt's

assumption that the blockbooks, which he assigns to about the close of the fifteenth century, were engraved on the wood "to avoid the expense of using metal type," we would remind our hearers that by 1485, the earliest date allowed by Mr. Holt, many rival printing presses were at work, the practical use of moveable type was an increasing business, and a page of text could be much more economically set up in type than executed by the engraver.

But we have a further answer to Mr. Holt's contention in regard to the blockbooks. He has said that the earliest, the "Biblia Pauperum," made its first appearance *circa* 1485. Unfortunately for his argument there are three existing editions, each bearing a date, printed respectively in 1470, 1471, and 1475. The 1470 edition, copied with variations from an earlier Dutch edition, is printed on both sides of the paper, and has the printer's mark; while the edition of 1475 bears the name of its engraver, Hans Sporer of Nuremburg. We may therefore very fairly assume that Mr. Holt . . . had but a limited knowledge of his subject.*

Before we conclude I would say a few words as to the construction of the blockbooks, and will take the "Biblia Pauperum" as a typical example. The

* Willshire, "Introduction to Study of Ancient Prints," Vol. I., pp. 37, 190; Dutuit, "Manuel de l'Amateur," Vol. I., pp. 92, 93. See also Sotheby, "Principia Typographica," Vol. II., p. 61, for reproduction of the printer's mark and date.

work—of course we are speaking of that which we regard as the earliest edition—is in small square folio. It consists of twenty sheets, one side only of each sheet being printed upon. For each sheet the illustrations were engraved upon the same woodblock, and on each block were two separate compositions placed a little distance apart. To produce the impressions, the engraved surface of the wood being inked by some form of roller or dabber, the impression was taken off, not by the printing press, which was not in use until a later date, but by means of a “frotton” or rubber; *i.e.* the sheet of paper being laid upon the inked block, pressure was applied on the back of the paper, until sufficient impress of the design was made upon the lower face. The process was repeated with a fresh sheet of paper upon every engraved block, the engravings, as you are no doubt aware, having been executed, not as in modern days across the grain, but on the plank, that is, in the direction of the fibre.

Each of the twenty sheets was then doubled down the middle, so that the forty impressed pages faced each other, and the sheets so doubled and placed in their order formed the completed book. Thus the second printed page was opposite to the first, the fourth opposite to the third, and so on; while the blank unprinted sides of the second and third, of the fourth and fifth, etc., were also opposite each other, and thus, when these blank unprinted pages were

pasted together, as we occasionally find them, the book would assume the appearance of a work printed in the ordinary way on both sides of the paper.] In proof of this statement, viz. that the illustrations were taken from engraved blocks of wood, and that the designs on the two opposite pages were executed on the same block or plank, I can refer you to a very fine example of the work, formerly in the possession of the Right Hon. Thomas Grenville, and bequeathed by him to the British Museum.

In the fly-leaf of this copy is inserted a letter written by Mr. Ottley, and addressed to Mr. Grenville. In this letter he says:—

Your copy of the “*Biblia Pauperum*” furnishes the best possible evidence that the two pages facing each other were invariably engraved on the same block of wood. The block from which two pages, 7 and 8, is printed had, before the impression was taken, been accidentally split horizontally into two pieces, and afterwards joined together by glueing. A white line, marking the joining, shows itself straight across both the pages over the heads of the figures in the six principal subjects.

I have myself examined the book, and have not only verified Ottley’s description, but have observed similar traces of fracture across pages 21, 22, on pages 29, 30, and again on pages 31, 32. I should add that I have carefully examined others of the early blockbooks, and when we speak of them, as I propose doing in my next lecture, may refer again

to the evidence afforded by these breakages across the wood. The opinion has been expressed, as no doubt you are aware, that, in regard to the earliest existing prints, it is not always easy to say whether they were produced from engraved woodblocks or metal plates. The decision is in some instances a difficult one, and in some cases it seems hardly possible to form an absolute conclusion.

† We do not say that all the blockbooks were constructed on exactly the same lines as the "*Biblia Pauperum*," but, generally speaking, this was the system followed in the formation of the earliest, that is, of those which preceded the invention of type-printing. It may not have been continued after that period; there is, in fact, no reason why it should have been, since the introduction of moveable type and the use of the printing press speedily brought about more convenient and more effective methods of production.

I will conclude my address with a quotation from Mr. Gordon Duff's pleasant volume on "*Early Printed Books*." He writes:—

"When we consider that printing of a rudimentary kind had existed for many centuries, and that during the whole of the early part of the fifteenth century examples with words or even whole lines of inscription were being produced, we can only wonder that the discovery of printing from moveable types should have been made so late. It has been said inventions will

always be made when the need for them has arisen, and this is the real reason, perhaps, why the discovery of printing was delayed. The intellectual requirements of the mediæval world were not greater than could be satisfactorily supplied by the scribe and the illuminator, but with the revival of letters came an absolute need for the more rapid multiplication of the instruments of learning."

LECTURE II.

DELIVERED MARCH 1, 1897.

[I commenced this address with a short summary of that which I delivered on February 24. Having concluded it with a general description of the manner in which the early blockbooks were constructed, taking for example the book known as the "Biblia Pauperum," I proceeded in this Lecture to speak of such of the blockbooks as have the closest relation to our subject—the steps which led to the invention of printing with moveable type.]

THE blockbook to which to-day I would first invite your attention is that to which I have already referred, and which is generally known as the "Biblia Pauperum." I have selected this, not because I think it was the earliest of the series, but because its method of construction, and also the character of its xylographic text, the manner and composition of its illustrations, its legendary and suggestive history, its probable origin, its presumed authorship, and its distinctive popularity, dispose us to regard it as the most instructive example of these interesting volumes.

The intention of the work was to furnish a series of pictorial representations of certain important events in the Life and Passion of our Lord, and to these

were added typical scenes or figures relating in some way to the subject, and selected mostly from the Old Testament, or occasionally from sacred legendary history. The principal designs occupy the centre of the page. On either side, the compartments divided by a pillar, some event of typical or parallel character is represented. Above the central design is a double arched compartment, on a smaller scale, with half-length figures of prophets or saints whose names are inserted below; and like figures are pictured in a corresponding compartment beneath the central design. Connected with these figures are labels or scrolls bearing legendary or prophetic inscriptions; in the upper right and left of the composition are xylographic lines of explanatory text, and below the scenes represented in the principal compartments are short descriptive lines in Leonine or rhyming Latin verse. The lettering is in Gothic character, and is produced, not from type, but from the engraved woodblock.

I would here call attention to a fact, interesting to lovers of early books, that immediately below the design in the upper compartment of each page appears a letter of the alphabet, placed there as an indication of the order in which the pages should be arranged. It has been supposed that not until years afterwards was a like practice followed by the makers of type-printed books, when it became the custom to place a letter or a numeral below the text on the recto of

the first page of each sheet, to indicate the order in which they should be placed by the binder. The letters so placed are described in catalogues of early books as *signatures*, and their earliest introduction in type-printed books has by some writers been attributed to Antonius Zarotus, a Milanese printer, in an edition of "Terence" of the year 1470, "M.CCCC.LXX. XIII. Martii." I cannot assert, as a fact within my own knowledge, that signatures are used in this work, since I have never seen the book, and Hain's somewhat cursory description is not from his own observation. Another edition of the "Terence" is catalogued by Hain, bearing the date 1481, "M.CCCC.LXXXI. Die XIII. Martii" (Hain, 15381). He gives a slightly varied description of the book, but the colophon in each, with the exception of the printed dates, is identical. Mr. Gordon Duff, in his interesting work on "Early Printed Books," page 73, refers to these two editions, and expresses his opinion that the so-called 1470 edition is not an earlier printed book, but is an example of that which was printed in 1481 "in which some ingenious person had erased the last two figures, XI, of the date." His conclusion is, I think, a very probable one. Others, as Rogers, in his "Manual of Bibliography," page 54, have said that signatures were first employed by Johannes Koelhof, in his "Nider Præceptorium Legis," printed at Cologne in 1472 (Hain, 11786), and of which there is an example in the British Museum. It is

somewhat singular that signatures should not have been found in earlier type-printed books, since their use had been recognized years before type-printing was "invented."

It is a curious coincidence that the first appearance of signatures in an Italian printed book should occur in a work issued in the same year, 1472, an edition of the "*Meditationes*" of Cardinal Torquemada, printed probably in Rome, but without name of place or printer (Hain, 15723).

But the origin of "signatures" much preceded the date to which we would assign the earliest of the blockbooks, since they had been used by the compilers of manuscript to mark the sequence of their sheets. We do not say that they are always to be found in early manuscripts, since they were only needed so long as the books they produced remained unbound; and as they would be usually placed by the scribe as nearly as possible at the foot of the leaf, they may therefore have disappeared under the hand of the binder. In early printed books signatures are sometimes found inserted by hand, with pen and ink, after the pages had been impressed. Mr. Blades, from whose biography of Caxton we have our information, speaks of the "inconvenience it must have been to the printers to print signatures away from the solid page," and believes that for some time they continued the old practice of signing the sheets by hand. It is quite possible therefore that, from the

first, the early printers made use of signatures, but partly from intention, and partly from the reckless "ploughing" indulged in by the binder, all traces of them have disappeared.

As to the title, that of "*Biblia Pauperum*," by which this blockbook is known, the Rev. T. H. Horne, in his "*Introduction to the Critical Study of the Bible*," which appeared in 1821—a book which I imagine was more popular in my younger days than it is now—tells us that "the '*Biblia Pauperum*' is a manual or kind of catechism of the Bible for the use of young persons and of the common people, whence it derives its name, *The Bible of the Poor*, who were thus enabled to acquire, at a comparatively low price, an imperfect knowledge of some of the events recorded in the Scriptures." This explanation was at that time, and even in more recent years has been, generally accepted, though, as Chatto sarcastically remarks, "the young and the poor must have enjoyed exceptional advantages at a time when many a priest could hardly spell his Breviary." Curiously enough, this title was not invented for the book until 1771, that would be some three and a half centuries after its production, when Heineken adapted it from a manuscript, at that time in the library at Wolfenbüttel—perhaps the identical manuscript described by M. Eugene Dutuit as now in the Bibliothèque Nationale at Paris—written on vellum, in Gothic character probably of the fourteenth century,

having no connection whatever with the block-book, but illustrated with rudely designed figures coloured in distemper, with text in rhythmical Latin, and commencing *Incipit Biblia Pauperum*. The same title, with a difference, appears again in the blockbook known as the "Speculum Humanæ Salvationis," where its author states in the Preface, or "Proemium," that he had composed the work *propter pauperes predicatores*, that is, not for the instruction of young and poor persons, but for the use of poor, possibly insufficiently educated, preachers. That the "Biblia Pauperum" had been created with a similar intent appears more than probable, and it may therefore appropriately bear the same designation. For greater convenience, the title by which it has been so long known may be retained, and this special blockbook, whenever referred to, be distinguished as "*The Biblia Pauperum*."

As with other blockbooks, the work was not entirely original, but was, to a greater or less extent, reproduced or elaborated from earlier and still existing manuscripts. Several of these have been described, or referred to, by Didron and others; but by far the most interesting is a manuscript in the Library of St. Florian at Vienne, in the Archduchy of Austria. This, says Sir E. Maunde Thompson,* "has the important distinction of being the earliest

* See Sir E. Maunde Thompson's Essay in the *Bibliographica*, Part XII., Vol. III.



From Folio 2 of the
BIBLIA PAUPERUM PRÆDICATORUM.

known volume containing the subjects of the 'Biblia Pauperum' in the complete form in which they appear in the blockbook; and the fact that more than one copy of the series, dating from the early part of the fourteenth century, is extant, justifies us in placing the period of its composition within the limits of the thirteenth century." A second manuscript of the "Biblia Pauperum" is in the King's Library in the British Museum. "There can be no uncertainty," writes Sir E. M. Thompson, "about the origin of this manuscript; the style of the art employed, and the character of the costume introduced into various miniatures, mark it as a production of the Netherlands in the early years of the fifteenth century." The subjects of the illustrations in the blockbook are, with only two exceptions, in correspondence with those in the manuscript, but are not direct copies. We have given, of course on a reduced scale, a reproduction of the composition on page 2, signature *b* (Plate IV.). In the centre is the Nativity, with an inscription at the foot of the page in rhythmical text, *Absque dolore parit virgo maria maris*. On the left the scene represents Moses and the burning bush, with inscription *Lucet et ignescit sed non rubus igne calescit*. On the right is pictured an event described in the 17th chapter of the Book of Numbers, when Aaron's rod, which had been "laid up before the Lord in the tabernacle, . . . budded and brought forth buds, and bloomed blossoms,

and yielded almonds"; below is the inscription *Hic contra morem producit virgula florem*. There is an error in this composition to which Sir E. M. Thompson draws attention in his account of the original manuscript. In the blockbook is represented the usual form of altar of the period, Aaron's rod is in the centre, and on either side of it are three candles. The design in the manuscript shows the twelve rods of the twelve "houses" of Israel ranged in a row upon the altar. "The engraver of the blockbook had evidently failed to consult his Bible, and, perhaps not unnaturally, converted the superfluous rods into the candles which he was accustomed to see in that position."

Further researches, commenced and prosecuted more than a hundred and fifty years ago, furnish at least presumptive evidence as to the personality of the author who conceived the idea of this pictorial work, and composed the accompanying text. "In an old copy of the xylographic 'Biblia Pauperum,'" says Didron, "at Florence, there is a Latin entry, in writing of the fifteenth century, to the effect that Saint Ansgar wrote this work for the conversion of pagans, and that it was entirely composed of signs." The "signs" no doubt implied simple outline devices, suggestive of Scriptural scenes, which in after days were developed in the Bible stories of the blockbook. This statement is corroborated by occasional passages in mediæval chronicles. Ansgarius or Ansgar appears to have been of noble French descent. Born in the

year of our Lord 801, he was brought up from his boyhood in the Abbey of Corbie, near Amiens, the principal monastic institution in that part of the French empire. A short but touching account of his life is given in Milman: he is described as a sensitive child, who, soon after his mother's death, in obedience to a vision, abandoned all sport and gaiety, and devoted his life to study and to prayer. In later years, a monastic outpost of the abbey called New Corbie having been founded in Westphalia, a country then under pagan influence, Ansgar removed thither, and afterwards, in the reign of the Emperor Louis the Pious, undertook a mission to Denmark, where he remained two years; thence he went to Sweden; finally returning to his earlier home, he was appointed to the newly founded Archbishopric of Hamburg, a position he filled with honour and dignity for some four-and-thirty years. We do not know that any manuscript of the "Biblia Pauperum," which we might attribute to the hand or regard as executed under the direction of St. Ansgar, is still in existence, but it is perhaps suggestive that one of the earliest of these manuscripts of which, according to Didron, we have any knowledge, is written in the Saxon-Danish tongue.*

* Particulars of the life and work of St. Ansgar are recorded by Munlen, in a series of Ecclesiastical Essays published at Copenhagen, 1798. See also Humphreys' "History of the Art of Printing," Didron's "Christian Iconography," Milman's "History of Latin Christianity," etc.

So far we have regarded the text and the intended purpose of the principal designs in the "Biblia Pauperum" as having been derived from earlier and fortunately still existing manuscripts. The arrangement of the composition in each xylographic impression was, as we have said, meant to picture some event in the Life of our Lord, placing on either side a parallel scene or incident generally drawn from Old Testament history; and if we accept the perhaps to some extent legendary traditions as to the life and labours of St. Ansgar, we may attribute to him the original conceptions which were afterwards more elaborately carried out by the wood-engraver.

But the triple arrangement of Biblical scenes which imparts a special character to the composition of the illustrated pages in the "Biblia Pauperum" may have had another origin, and have been inspired by the artistic design of certain decorative church-work. Sir E. Maunde Thompson, in his essay in the *Bibliographica* to which I have above referred, gives a short description of a beautiful series of enamels which formed part of an altar frontal, still preserved in a side chapel in the Church of Klosterneuburg, near Vienna. The larger number of these—forty-five of the fifty-one—were the work of one Nicolas de Verdun, executed under the direction of the Abbot Werner, and bear the date A.D. 1181.*

* M. Eugene Dutuit, in Vol. I., p. 100, of his "Manuel de l'Amateur d'Estampes," refers to the designs of this antependium, but describes

And further, of the thirteen typically arranged groups in the series, three are repeated in the block-book: the Last Supper, accompanied by the Old Testament types of Abraham and Melchizedek, and of the Miracle of the Manna; the Entombment of our Lord, by scenes of Jonah and the Whale, and of Joseph in the Pit; and the Ascension, by the Translation of Enoch, and by that of Elijah in the Fiery Chariot.

Still another assumed origin of the designs which appear in the "*Biblia Pauperum*." A bibliographer named Lessing, writing in 1873, tells us that one Martin Crusius, a learned author and historian, has given a description of forty glass paintings which decorated the windows of the Convent of Hirschau near Wurtemberg, asserting that the scenes pictured in these windows were identically the same as those in the forty illustrated pages which appear in the blockbook. Aroused by the importance of such a statement, Lessing himself made further investigations, and informs us that he had the good fortune to discover, in the library of Wolfenbuttel, a manuscript which had belonged to the Convent of Hirschau, and which had been compiled by Jean Parcimonius, abbot of the monastery. In this manuscript the forty designs in the windows are fully described,

them as engraved on copper and niellated. Reproductions in chromolithography were published by J. Arneth and A. Camesina at Vienna in 1844.

and the composition, the introduced figures, and the inscriptions of texts are found to be in entire correspondence with the pictured illustrations in the forty pages of the "Biblia Pauperum." The similarity, as described in the manuscript, is so exact that Lessing does not hesitate to affirm that these glass paintings were the originals from which the illustrations in the "Biblia Pauperum" had been copied, and contends that the artist who composed the designs should, for all future time, be referred to as "The Painter of the glass windows at Hirschau." The conclusion is an interesting one, but before we accept it, it would be well to inquire what was the probable date of these glass windows; and we discover that there is existing documentary evidence that these glass paintings were designed and placed in the cloister windows under the direction of two successive abbots of the monastery, Blasius and Jean de Calvo, in the years 1489, 1503, and 1509—that would be some seventy or more years after the date which we assign to the first edition of the "Biblia Pauperum"! We think, therefore, that the manuscript from which Lessing derived his information referred to some restoration of the windows, and not to their original construction, and this is the more probable since the very existence of the cloister with its painted windows is little more than traditionary, as is also the date of its erection, assigned to about A.D. 1085, *i.e.* to the later years

of the eleventh century. If therefore we accept the legendary history as to the existence of these windows, and the resemblance in their designs to those in the "Biblia Pauperum," it is impossible to decide whether they were original or were copied from some early illustrated manuscript. As I have already intimated, the convent itself has long since disappeared; it is believed to have been burnt down in 1694, *i.e.* more than two hundred years ago; and I think that the reasonable conclusion would be that, while we accept the statement as to the existence and character of the pictured compositions which distinguished the windows, we may assume that the designs were taken from the illustrated pages of the blockbook, and the windows placed in their position some time during the second half of the fifteenth century.

We may now turn our attention to another question of considerable importance in relation to our subject. In accordance with generally accepted conclusions, we regard the production of the Helglein and the blockbooks as distinctive steps towards the invention of type-printing, but we have not yet adduced any entirely satisfactory evidence as to the locality or country to which they should be assigned. As regards the Helglein the inference is decidedly in favour of a Flemish origin, but in respect of the "Biblia Pauperum" opinion is divided. Some authorities, as, for instance, Heinecken and Ottley, speak of

them as unquestionably German ; others again, and among these I would enrol myself, do not hesitate to assign them to the Netherlandish school. It has been suggested that conclusive evidence as to locality might be afforded by what are known as the *water- or paper marks* which are found in some of these blockbooks. It has been ascertained by the researches of Sotheby* that these watermarks are identical with those commonly found in letters or books of accounts written in the Low Countries, and also in France and in England, during the fifteenth century, and are different from the watermarks in the manuscripts of the same century written in Central Germany. Again, he tells us that the watermarks found in the paper used for the printing of the earlier blockbooks are, for the most part, confined to the Unicorn, the Anchor, the Bull's Head, and the letter P. I do not myself think that any entirely satisfactory conclusion can be founded on the evidence of the watermarks ; undoubtedly some special forms are more commonly found on paper manufactured in Northern towns than they are in paper made, say, in Italy. Take, for instance, the watermark P. It is assumed, perhaps correctly, to have some reference to the House of Burgundy ; it is frequently met with in paper used in manuscript (as also in books printed in the Low countries) from the middle of the fourteenth to the end of the fifteenth

* Sotheby, "Principia Typographica."

centuries. It is found in the first and second editions of the "Biblia Pauperum," in the first edition of the "Apocalypse," and in the first and second editions of the "Ars Moriendi." It occurs again in the earliest English printed books, but this of course in the later years of the fifteenth century, and on paper imported from Holland. The P watermark was at or about the same time in use in Germany, but is seldom found elsewhere. I have myself, during the last few years, spending many pleasant hours in the libraries in Naples and in Rome, made sketches or tracings of more than two hundred watermarks occurring in fifteenth-century Italian printed books, but the only P watermark I have met with was in an edition of "Bartholomæus de Ursinis" printed by Sixtus Riessinger, a German emigrant, who had established his press in Naples, and produced this work in 1473. Another watermark of frequent occurrence in paper made in Holland is *the Horn*. This, says Sotheby,* "was used as early as 1370, and is found in books of accounts at the Hague of that date"; but I do not know that it appears in the paper of any of the blockbooks. Sotheby has noticed one instance of its occurrence in a book printed at Rome by Ulricus Gallus in 1471. I have seen it in a "Petrarch" printed in Venice by Vindelinius de Spira in 1470, and, what is far more interesting, in the "Augustinus de Civitate Dei" of 1467, the last of the four books

* Sotheby, "Principia Typographica," Vol. III.

printed by Sweynheim and Pannartz at the Monastery of Subiaco, where two years earlier they had established the first printing press in Italy.

But after much careful consideration I am not disposed to think that any really satisfactory evidence as to the origin of early printed books can be gained by reference to the watermarks ; the frequent occurrence of particular marks may lead to presumable inference, but cannot be accepted as distinctive evidence of the country in which the paper had been manufactured. That the paper used in the Low Countries was not entirely of home manufacture, or even "made in Germany," is shown by the existence of an early record to the effect that, in the year 1380, part of the cargo of a ship despatched from Genoa to the port of Sluys in Flanders, and which had been driven ashore on the English coast, consisted of "twenty-two bales of writing-paper," thus proving that certainly some of the paper used in Northern towns was imported from Italy. There is also evidence of the existence of paper-mills in or near Lyons, from which a foreign trade was carried on. We do not say that there were not at that time any paper-mills in Germany or in the Low Countries, though all traces of such have long since disappeared : it is said, for instance, that a paper-mill, moved by water-power, was established at Nuremburg by Ulmer Stromer in 1390 ; and Sotheby tells us, we presume on sufficient authority, that so early as 1352 the public offices at

Haarlem were supplied with paper from Antwerp, whether manufactured there or imported from other countries we are not informed ; still we may reasonably suppose that such manufactories did exist, though not perhaps producing sufficient paper to meet the increasing demand.

So far we have made but little advance in our endeavour to assign a probable origin or direct local influence which may have led to the construction of the earlier blockbooks ; we will now turn our attention to the xylographic illustrations.

All competent critics are agreed in recognizing a certain artistic similarity in the character and composition of the designs used in illustrating the earlier blockbooks, and this is the more noticeable in the three to which we assign the higher position, namely, the "*Biblia Pauperum*," the "*Canticum Canticorum*," and the "*Speculum Humanæ Salvationis*." A careful comparison, we think, supports the assumption that the designs in each, if not by the same master, proceeded from the same artistic "school." It must be remembered that, in estimating the value of this kind of work, and in endeavouring to recognize the inspiration or influence of the master-painter or designer of a particular period, it is not the execution of the engraving, which may have been effected by the hand of some more or less competent workman, but the tone and character of the composition, and

the distinctive quality of the designs, which should direct our opinion. Take, for instance, the page of the "Biblia Pauperum" (see Plate IV.): no matter how rudely the engraving was executed, there is not only a singular harmony in the balance of the composition, but also an unconscious gracefulness in the attitudes and the actions of the principal figures, and even in the disposition and outlines of the drapery, which cannot fail to attract the attention of all who have observed the lines of construction so largely followed, and that almost instinctively, by the more important masters of the early Flemish school.

You will observe that, while the upper compartment is divided from the middle by a horizontal line, the central scene of the triptych has the base slightly raised above those on either side, thus correcting what would otherwise be too distinctive uniformity.

Notice the balance of composition in the upper and lower central designs, the pose of the figures in the arched windows, the position given to the text on either side, and the graceful curvature of the inscribed scrolls.

A similar formal balance of composition is generally apparent in the work of the Van Eycks. I have by me a photographic copy of an altar-piece in the Dresden Gallery, of which an illustration also appears in Woltmann's "History of Painting"

(Vol. II., fig. 140), and who describes it as "one of the loveliest works of the master." The like balance prevails in the superb altar-piece painted for the Church of St. Bavon at Ghent. You will understand that I am not claiming for the Van Eycks the original idea of introducing such balance in composition; it was a rule which belonged to very early times: it is seen, for instance, in the mosaics which adorn the Church of St. Cosmo and St. Damien in the Roman Forum; equally harmonious is the design of a mosaic at Ravenna,—all of which are assigned to a period so early as the fifth century. What I contend is, that the composition of the "*Biblia Pauperum*," which I should place among the earlier blockbooks, shows at least the influence if not the design of some talented and practised artist, and I venture to endorse the opinion of Berjeau that that influence distinguishes the school of Van Eyck and his earlier followers.

If our time allowed I should be tempted to go still further into this question, and endeavour to show how certain Flemish artists of the same and the succeeding period, as, for instance, Roger van der Weyden (born 1400), to a greater or less extent freed themselves from the rule, while others, such as his gifted pupil Hans Memling, superior to his master in nearly every artistic quality, constantly conformed to it; but such a digression would be a departure from our subject, and I have only referred to the

matter to show that these illustrations, however rudely designed and executed, manifest an artistic influence such as we recognize in the Flemish master-painters of the day; and further, to strengthen my conclusion that the special illustrated works we are considering were not of German but of Flemish origin, I would add that, even if the designs for these compositions were not furnished by the master-painters, the Van Eycks or their immediate pupils, they at least show the decided influence of their "school."

We have devoted so much of our time to the "Biblia Pauperum," not only because it presents a typical or representative form of construction more or less apparent in other blockbooks of or about the same period, but also because in the artistic character of its illustrated pages we recognize a distinctly Flemish influence. This is an important conclusion, in so far as it assists us in our endeavour to localize, not only the origin of this "Biblia Pauperum," but also that of other works of similar character to which we would now invite your attention.

We have said that we do not assign the priority of production to the "Biblia Pauperum"; that which we ourselves regard as the earliest is known to us by the title of the "Exercitium super Pater Noster," a pictorial essay on the use of the Lord's Prayer.

Santander, writing in 1806, was, I think, the first to call attention to this exceedingly rare work ; but, as M. Eugene Dutuit has shown,* he knew it only in the second edition : a first edition was referred to, but not described, by Guichard in the *Bulletin du Bibliophile* in 1840 ; a third and comparatively recent edition has been mentioned, but of this I can give no particulars, nor should I think it necessary, since it is probably a more recent reproduction.

In its completed form the work consists of ten leaves, in small folio. The woodcut illustrations are impressed on one side only of each leaf, and are printed by means of the "frotton" or rubber, in the first edition in brown distemper, and in the second, which appeared some years afterwards, in a grey-toned ink. In each of the two editions the illustrations are hand-coloured ; in the second the blocks are somewhat smaller in dimensions than the blocks which had been engraved for the first. Only two examples are known—one of the first, the other of the second edition ; they are both in the Bibliothèque Nationale at Paris. They were discovered in 1805 in the possession of Joseph Ermens, a printer and bookseller in Brussels, and were acquired for the Bibliothèque for the very moderate sum of twelve francs, thus affording curious evidence of the low prices rare incunabula would command in days gone by. Of the first edition two leaves, the first and

* Dutuit, "*Manuel de l'Amateur d'Estampes*," Vol. I., Part I.

*Publ. by Graphische
Gesellschaft*

ninth, are wanting. Of the remaining eight the illustrations occupy about three-quarters of the page, leaving sufficient space below for the insertion of some ten or more lines of manuscript commentary, written in the Flemish dialect of the early fifteenth century, as are also the short inscriptions inserted within some of the illustrations to indicate the personages represented. Occasional manuscript lettering also appears upon scrolls connected with the figures; these are written in red ink—not in Flemish, but in Latin. The illustrations throughout are more or less hand-coloured. In each design the same two persons are introduced: one is a tonsured Friar, a member of some religious brotherhood, who on his knees is entreating the Almighty to teach him to pray; the other, who accompanies him, represents the Angel who directs his devotions. Both are winged—this is explained by the commentator as symbolic of religious freedom—and they are clothed in white garments, emblematic of purity of heart; the interceding Angel in each illustration is distinguished by a small shield, borne on his breast or on his shoulder, and charged with a cross.

M. Dutuit has given outline facsimiles of three of the illustrated pages of the first edition with the hand-written text below. In one of these (Plate V.) the Almighty is represented wearing the triple crown and seated upon a throne. He supports a globe in His left hand and raises the other



In der comen de hede en die bueder te samen voer den vader. en daer knielen sy
met onsen here ihesum xpm. die met hem knielt om ho te helpe te ver-
crighe vanden vader dat sy begheere. En om den vader wilke come te sijn zoo
grintensien inet sijn hoestren name seggende oetmoedlike dat eerste poent vns
den pater noster aldus. *pat n. qui es* in dese roete groete sijn. in poente die de
bedelare zere troestehc sijn. D eerste so want hy gode verpriet als een verco-
kent seggende vader Zander want verpriet sijn bueder met hem es segge
de onse. e derde want hy den vader zere wilke come sijn inetter veruete als hy
segghen *qui es*. want dit es sijn here en hoestren name en tytel also hy van
hem selue ghelinge groet. segghende *ic ben die ic ben*.

The Second Plate in the First Edition of the
EXERCITIUM SUPER PATER NOSTER.



in the act of benediction. Jesus Christ kneels in front, and to the left are the suppliant brother and the intercessor; while on a scroll above are the words which commence their prayer, *Pater noster qui es.*

A reproduction of another of these compositions (Plate VIII. in the original work) has been given by M. Dutuit, representing the dangers of temptation. Three female figures are seated at a well-furnished table: one bears a crown, emblematic of pride and vanity; the next presents a plate, suggestive of luxury and self-indulgence; the third grasps a money-bag, implying avarice. At the far end of the table is an unhappy man who has yielded to temptation. Death seizes him by his shoulder, and above, the Devil carries away his soul. The Angel and the Friar are on their knees in the lower left, and from the mouth of the Friar proceeds a scroll with the inscription *et ne nos inducā ī temp-* (lead us not into temptation).

It is well to detail what we consider to be the true meaning of this composition, since it has been curiously misrepresented by Deschamp and others, who regard it as a satirical representation of the vices of certain monastic orders. They describe the three seated female figures as the "three foolish virgins," the bag of money as a drinking-cup, the diadem held by the third to be a tambourine, and so on; but it is not thus we explain the design,

and a perusal of the Latin text, which accompanies the copy of the scene in the second edition, confirms our opinion.

As to the value of the work from an artistic point of view, Renouvier, as we are reminded by M. Dutuit, has asserted that the character of the engravings shows the hand-work of the playing-card makers rather than that of the professional xylographer. I do not myself think either the composition or the execution is so utterly indifferent as are the designs of the playing cards. We must remember that artistic merit was not a consideration in the construction of these religious pictures; their intention was entirely educational, and therefore realistic. If they show any gracefulness in form, elegance in outline, in figure, or in costume, any distinctive sentiment in expression or picturesqueness of accessories, it is because the hand that executed the designs was that of an artist, and so, as it were unconsciously, the work he would produce was of a higher type. But what we especially notice in the "Exercitium" is this, that not only the general character of the composition, but also the handling of the graver, as seen in the outlines of the figures and the folds of their draperies, and in the absence of all attempts at shading, are so closely in accordance with what we see in the prints of the "Brussels Virgin" and the "Virgin of Berlin," of which we have given illustrations (see Plates I. and III.), and which





The First Plate in the Second Edition of the
EXERCITIUM SUPER PATER NOSTER.

we assign to the early years of the fifteenth century, that we may in all probability assign the first edition of the "Exercitium" to the same or to about the same period, *i.e.* to about the years 1418 to 1420, and see in it, if not the work of the same hand, yet of the same school to which we attribute these interesting Helglein. If the composition is more elaborate, it is because the work was more of an educational character. Conceived and executed under religious influence, it was intended, not for general circulation, or for exhibition in the churches to attract the attention and direct the devotion of those who came there to pray, but was meant to guide the minds of the novices who were destined or had devoted themselves to a holier life.

As regards the second edition, the illustrations are copied, though somewhat freely, from those of the first edition: we not only observe important variations in figure, costume, and technical execution, noticeably in the introduction of shading, but we see that the inscriptions on the scrolls and elsewhere are no longer in manuscript, but are impressed from the engraved block; while, instead of the handwritten Flemish text below the designs, space is left above for five engraved (not type-printed) lines of Latin text, executed and imprinted from the same block as the illustrations, but divided from them by a broad marginal line.

Publ. by Pelinski.

etc.

The first of these illustrations (Plate VI.) forms the

Introduction or Preface to the work. The Friar is seated in the foreground, the word *Frater* is engraved upon his habit, with his eyes turned heavenward he is asking God to teach him to pray ; thus reads the inscription on the scroll below his left hand, *Dñe doce me orare*. While he prays the Angelic Intercessor appears, extending his hands in the act of welcome ; *Oracio* is inscribed upon his robe, and on the scroll is *Veni docebo te pater noster*. Behind the seated brother, on the left, are a convent and a church ; in the distance to the right, beyond a swift running stream, rises a forest in which a stag is seen, the landscape suggestive of the rural locality in which the convent is situated. The upper line of the text above the composition reads—what we have accepted as the title of the work—*Exercitium super Pater noster*.

With respect to the date of this second edition, and the probable locality of its execution, very suggestive and I think important evidence is afforded by another blockbook, known to us under the title of the "Spirituale Pomerium," in which the illustrations are of a similar character, and which fortunately bears a date. Although referred to by early writers, it was first described at length by M. Alvin, who has also given reproductions of the illustrations, in a paper written for the *Documents Iconographiques*, published at Brussels in 1877 ; valuable notes will

also be found in Dr. Willshire's "Introduction to the Study of Ancient Prints," and in the more recent work of M. Eugene Dutuit.

The "Spirituale Pomerium" consists of twenty-four small folio leaves. It is in manuscript, divided into chapters, and at the commencement of each chapter is a woodcut, with legends and with Roman numerals, imprinted on a separate piece of paper, and then pasted on to the page in a space which had been reserved for it. There are twelve woodcuts, four inches wide and rather more than four inches high. They are impressed in a dark grey, almost black, fatty ink, probably by the rubber. The subjects of the designs are scriptural, and the manuscript text below explains their mystical meaning, intended to afford a pious meditation for each hour of the day. The work is preceded by a Preface, ending, in red lettering (we omit the abbreviations), *Editum hoc spirituale pomerium per humilem fratrem Henricus ex Pomerio, canonicum regularem in monasterio Marie Viridis Vallis*. At the end of the manuscript of the book is inscribed *Explicit spirituale pomerium editum anno dñi M.CCCC.XL*; and then follows a final prayer, in which both title and date are repeated, *Explicit, ut supra, spirituale pomerium editum et completum anno dñi M.CCCC.XL*.

Henricus ex Pomerio—a Latinized form of Henri van der Bogaert, or Bogaerde, the early form of the Dutch word *Boomgaert*, a fruit garden—was a Canon,

and, at the time when this blockbook was issued, Superior of the Priory of Groenendael, a religious house of the Augustine Order, situated in the Forest of Soignes, a few miles from Brussels. He was a native of Louvain, where he was born in 1382. He died at the age of eighty-seven, in 1469. Henricus ex Pomerio was the author of several other religious works, a list of which appears in an authentic document written towards the close of the fifteenth century, by a Canon Gilles van der Hecken, believed to have been a brother of the Order, and still preserved in the Royal Library at Brussels. In this list are found the titles of no fewer than five treatises on the Lord's Prayer, one of them described as "Figuralis Expositio super Orationem Dominicam."

Now, attached to the example of the second edition of the "Exercitium super Pater Noster" in the library at Paris, is a lengthy paraphrase in Latin of the Lord's Prayer; it is in manuscript, the handwriting very closely resembling the handwriting of the "Spirituale Pomerium"; it comprises eleven pages, and it ends *Explicit expositio figuralis super orationem dominicam*. Surely the curious similarity in the Latin sentences, and in the handwriting, is not an accidental coincidence; on the contrary, it affords strong presumptive evidence that the Latin manuscript attached to this second edition of the "Exercitium" was by the hand of Henricus ex Pomerio, the author of the "Spirituale Pomerium."

But is there sufficient ground for a still further assumption—that both these works had their origin in the Priory of Groenendael?

We ourselves have not yet had the opportunity of comparing the original woodcut impressions in these particular works—we only know a few of the illustrations of the “Exercitium” from the facsimiles given by M. Dutuit; but M. Dutuit and other competent critics who have compared them have not hesitated to affirm that the woodcuts in the second edition of the “Exercitium” and those inserted in the “Spirituale Pomerium” are by the same hand: they recognize in them the same style of composition and of drawing, the same manner of engraving upon the blocks, and the same character in the lettering of the text upon the scrolls.

We claim therefore sufficient ground for our contention that the second edition of the “Exercitium” was produced at or about the same time as the “Spirituale Pomerium,” which bears the date 1440, and that these works were designed and executed within the Priory of Groenendael, both of them under the direction and one partly by the hand of Henricus ex Pomerio.

But this is not all. Whence did the first edition of the “Exercitium” originate? It is, as you will see, a somewhat important question. We have assigned the execution of this first edition to about the years 1418—1420. May we not reasonably assume

that it also was produced in the Scriptorium at Groenendael? It may not have been under the direct supervision of Henricus ex Pomerio, since at the date of its production he might not have attained the position of Superior, but he would probably have been at that time an inmate of the monastery, and would no doubt have taken part in the work of the Scriptorium.

This Priory of Groenendael was the abode of a branch of the Augustine Order known as the "Fratres Vitæ Communæ," or "Brethren of the Common Life." This society* had been instituted in the later fourteenth century by Albertus Gerardus, or Gerart de Groot, *i.e.* Gerard the Good. He was born in 1330, and died in 1384. The brotherhood was not established in any regular home until the year 1400, that is, sixteen years after the death of Gerart, when a residence was provided for them at Deventer. In after days the society became widely extended: in 1430 they numbered forty-five homes, mostly in Germany and in the Low Countries, and in 1460 more than twice that number; and what is of still greater importance in reference to our subject, there is reason to believe that, in the later years of the fifteenth century, more than one of the distinguished printers in Northern towns carried on the art of printing within these monasteries, or, as

* Hallam, "Literature of the Middle Ages," Vol. I.; see also Timperley on "Printing and Printers," 1839.

did Ulrich Zell, proceeded from them to establish and carry on their private press elsewhere.

The rules of this society required of the brethren, not only that they should lead a strictly religious life, but that they should especially devote their talents to the encouragement of education ; we find that, in pursuance of these duties, they both opened schools for the instruction of the young and widely extended the advantages of the Scriptorium, those most fitted for the work copying and re-copying MSS., and creating new doctrinal and devotional works by which religious knowledge might be extended.

We have already referred to certain distinctive similarities in design and execution between the illustrations in the first edition of the "Exercitium" and in the Helglein known as the "Brussels Virgin" and the "Virgin of Berlin" (Plates I. and III.), and have ventured to assign them to about the same period and to the same school : if our conclusion is accepted, as we think it may be, with regard to the "Exercitium" having originated in the Scriptorium at Groenendael, we may assume that these Helglein were also designed and executed there ; and, further still, may reasonably believe that other works of equal importance and of similar character were also produced in the monastery. It may not prove our point, but it is a singular coincidence that among the incunabula in the Royal Library at Brussels is

an example of the "Spirituale Pomerium" in early and probably contemporary binding, which contains not only the complete work, but with it have been inserted two leaves of the "Biblia Pauperum": was that also designed and executed in the same workshop? *

Interesting notes relating to the convent at Groenendael may be found in Dr. Willshire's "Introduction," as also in the Essays of M. Alvin, Renouvier, and others. From them we learn that several of the early Flemish artists made there an occasional religious retreat; among others, Dierick Steuerbout and Hugo van der Goes were not unfrequent inmates; and it is on record that at a later period, *i.e.* about 1446, Roger van der Weyden painted an altar-piece for the convent chapel, representing the "Philosophers converted by Saint Catharine," a picture which has now unfortunately disappeared. It is therefore no fanciful assumption that one or other of these rising artists would furnish designs for such xylographic works as the craftsmen in the Scriptorium would endeavour to reproduce; and to one or other of them we may attribute the pictured scenes which were used in the second edition of the "Exercitium"; possibly to the youthful hand of Roger van der Weyden, who at the time would

* This example of the "Spirituale Pomerium," at one time in the possession of M. de Candelle, is believed to have been acquired by some member of his family on the suppression of the Priory of Groenendael, which took place in or about the year 1783.

have been some eighteen or twenty years of age (he was born in 1400), we may assign the compositions which appear in the first edition. They show but little artistic merit, but are such as in his earlier years he might have produced.*

The blockbooks having once become popularized, it is certain that their construction would not be limited to any special localities. We take the work known as the "Apocalypse"—"Historia Sancti Johannis Evangelistæ." It consists of a series of wood-engravings, intended to illustrate the most remarkable passages in the Book of the "Revelation of St. John the Divine." Each design is accompanied by xylographic text, introduced on tablets or scrolls in various parts of the composition, and placed above or below, or close beside the subject to which they especially refer. The impressions were obtained by means of friction in a pale brown medium, known as *distemper*, and were printed on one side only of the page. What may be the relative position of this xylographic work in regard to those which I have already described it is difficult to decide. Dr. Willshire considers (of course we are speaking of the first

* Of the early life of Roger van der Weyden very little is known. A native of Tournai, one of the largest municipalities of Belgium, in 1436 he was living in Brussels, where he held the position of "Town-Painter." Unfortunately few if any of his earlier works have been preserved, although four of his largest and most important were executed for the town-hall at Brussels (see Kugler's "Handbook of Painting: German, Flemish, and Dutch Schools"—Murray, 1889).

edition) it is the earliest of the blockbooks. Sotheby, in his "*Principia Typographica*," assumes it to have been executed between 1415 and 1420. Chatto affirms that it cannot be placed earlier than 1430, while others, though I think on entirely insufficient grounds, would assign it to the second half of the fifteenth century. The character of the armour, mixed plate and chain, has been referred to as evidence of an approximate date; but this cannot be relied upon, since the designs which are introduced must not be regarded as original, but are taken from earlier illustrated manuscript. Some, in fact, are freely reproduced from a thirteenth-century "*Apocalypse*" now preserved in the Bodleian Library at Oxford. The authorship of this manuscript, as we learn from Dr. Willshire, has been by some authorities assigned to St. Ansgar, but the arguments they have adduced appear to have been founded on an erroneous interpretation of a passage in the Life of that saint compiled by Rembertus, as related by Heineken. The locality to which the production of the "*Apocalypse*" should be attributed has been also the subject of discussion. While some iconophilists consider that it was executed in the Low Countries, others, among them Heineken and Passavant, declare that it belongs incontestably to Upper Germany. An ingenious suggestion as to the nationality of the artist is put forward by Chatto. He contends that the drawing of many of the figures



From an Early Edition of the
APOCALYPSIS SANCTI JOHANNIS.

corresponds rather with the manner of Greek than of Northern art, and gives facsimiles of two singular shields introduced in the designs, one bearing the crescent, a badge of the city of Constantinople previous to its capture by the Turks, the other representing the arms of the Knights of St. Constantine, a military Order founded at Constantinople about the year 1190. The explanation no doubt would be that the artist in the Scriptorium who drew the designs was, if not himself of Greek nationality, yet conversant with Grecian history of early mediæval days.

Six editions of the "Apocalypse" have been preserved. The compositions in some of these show variation in subject, although they are arranged on the same plan—*i.e.* with two pictured scenes, an upper and a lower, divided from one another by a horizontal line. Even in the earliest edition we observe differences of execution in some of the impressions, showing the work of different hands. The illustrations in the later editions are copied from those of the earlier, are less artistic, and betray the work of a less practical engraver. We show a facsimile (Plate VII.) of the design on page xiv of the earlier edition. In the lower part St. John is represented seated at a table, about to write in a book which is before him, when an angel appears and commands him, "Seal up those things which the seven thunders uttered and write them not."

The character of the two figures as engraved for this earlier edition, their more accurate proportion and outline, and their expressive attitude, contrast very favourably with the representation of the same scene in the later editions: we feel, as we look at them, that the later composition is merely a copy, of no special merit, produced by the ordinary workman in imitation of the original; and while in the earlier we recognize distinct artistic influence, and see in its technical execution a striking similarity to the engraved work apparent in the "Virgin of Brussels," and in the "Virgin of the Berlin Cabinet," fully sufficient to justify its attribution to about the same date—*circa* 1420—and to the same school as these interesting "saint-pictures," we should certainly refuse to assign the illustrations in the later editions to that school, and contend that when Passavant and others declared that these engraved figures belong incontestably to Upper Germany, it cannot have been from the earliest, but must have been from what we know as the fifth or final edition, that our opponents have drawn their conclusion—an edition which, with its distinctive designs, is by Sotheby attributed to Germany, and was certainly not the production of Holland or the Low Countries; and in reply to the contention of Heineken, who assigns the precedence to the edition which we regard as the fifth, and which he affirms is of distinctly German character, we think he is far too

much inclined, when arranging editions in what he considers their proper order, to place the ruder and less accurate work in the foreground, and regard all superiority in execution or design as evidence of more recent date. I do not say this in any merely critical spirit; we owe so much to his researches that we must always speak of him with respect, but, all the same, we cannot assent to the conclusion that inferior workmanship must necessarily be attributed to an earlier date.*

Our own conclusion is entirely in accordance with that expressed by Sotheby, that it is the final (and perhaps also the fourth) edition which shows German influence, and that the original work must be assigned to some Northern locality; but we would go further—we believe that the first edition of the "Apocalypse" was designed and executed under the same religious and artistic influence, and in the same workshop, as were the Helglein we have already mentioned, the "Virgin of Brussels" and the "Virgin of Berlin," as also the blockbooks entitled the "Exercitium," the "Spirituale Pomerium," and also the still more important "Biblia Pauperum."

For another of these blockbooks, the "Ars Memorandi," it is somewhat difficult to assign either locality or date. It is a work of 4to size, in fifteen single sheets, on each of which, impressed only on one side of the paper, is a full-page xylographic design,

* Consult Sotheby, "Principia Typographica."

and an opposite page of appropriate text also impressed from the engraved block. The designs, which are intended to recall and emphasize the principal or leading events referred to in the four Gospels, are curious rather than artistic, and in both their composition and execution betray the work of an unskilful hand. Without the accompanying text their meaning would not be easily explained, and however helpful they may have been, at the time of their production, in imparting religious teaching to the uneducated poor, or to the inmates of a monastery, they would not be of much avail as an aid to the memory of the modern Biblical student.

The first three pages of design are intended to represent the teaching of St. John. He appears under the symbol of an eagle; above is the Holy Dove, while the heads introduced on either side are emblematic of the other Persons of the Trinity. A fish resting on the eagle's wing in the upper left, and two fishes and five loaves opposite, are typical of the Pool of Bethesda and the feeding of the five thousand, and a water-bucket and a crown below are meant to signify the glory awaiting those "who drink the water of everlasting life."

But it is the text which interests us most; it is so exceedingly well engraved. As Sotheby remarks, the uniformity with which it is cut is truly astonishing, presenting letters more remarkable for size than letters that have been found in any other of the

blockbooks, "being nearly of the same size as the type of the celebrated Psalter printed at Mentz in 1457 by Fust and Schoeffer." This lettering, it should be added, has induced some authorities to assign a later date to the work. The excellence of the lettering cannot, however, be accepted as a conclusive proof; my own conclusion is that it affords no evidence, at least none on which we can establish a date. The inscribed text in manuscript books of a much earlier date is often exceedingly good, and it is quite possible that the xylographic lettering executed for the "Apocalypse" may have been imitated from the text of some large Service-book, or Missal, to which the skilful wood-engraver in the Scriptorium had access.

Another of the blockbooks to which it is difficult to assign a date is the "Ars Moriendi," of which a clever reproduction was printed by the Holbein Society in 1881. The copies were taken from an example in the British Museum which had been acquired by the Trustees at the Weigel sale in 1872, and are prefaced by an Introduction written by the late Mr. George Bullen, at that time Keeper of the Printed Books in the British Museum. The illustrations compare very favourably with the original, much more so than do the facsimiles issued by Weigel himself in 1869. Mr. Bullen believed this example of the "Ars Moriendi" to be the first edition, by reason of the beauty and originality of

the designs, and the sharpness of outline. There is, however, another example of the work in the town library at Haarlem, from which Mr. Sotheby obtained facsimiles, and which he believes to have been the first edition ; the reproductions support his conclusion.

The completed work is made up of twelve sheets, each folded in two leaves and printed only on the inner side, so that when placed in book-form the recto of leaves 1, 3, 5, etc., are blank, as are also the verso of leaves 2, 4, 6, etc. The first two printed pages are occupied by Preface or Introduction ; then follow eleven illustrations, each occupying a page, while opposite is the explanatory text. The pictorial illustrations in this book, says Mr. Bullen, "are of the lower Rhenish school of art, practised at Cologne up to about the second quarter of the fifteenth century, when, according to Weigel and Zestermann, the native German art is shown to have been much influenced by the school of Roger van der Weyden."

I have referred to this because it is suggestive of the book having been produced, not in the Low Countries, but in Germany. The question is a somewhat difficult one, and its solution must depend on the date to which we should assign the work. If, in accordance with the decision expressed by Mr. Bullen, we regard it as a later production than the "*Speculum Humanæ Salvationis*" and the "*Canticum Canticorum*," about which I propose to speak in my next lecture, we must place it in the second half of the

fifteenth century, which means that it did not precede but followed the "Invention of Printing." On careful consideration I am disposed to accept Mr. Bullen's conclusion when he says that the manufacture of blockbooks "appears to have travelled, about the middle of the fifteenth century, into Germany, and fixed itself at Cologne, where this edition was in all probability executed."

So far we have confined our attention to purely xylographic work. In my next lecture I propose to treat of a more advanced form of the blockbooks, in which the text was partly, afterwards entirely, set up in moveable type.

LECTURE III.

DELIVERED MARCH 3, 1897.

[In my address on March 1 I described such of the more interesting blockbooks as are generally supposed to have preceded the invention of type-printing, commencing with that which may be regarded, from the character of its designs and the method of its construction, as the most representative of the series, the so-called "*Biblia Pauperum*." I then invited attention to the first edition of the "*Exercitium super Pater Noster*," to which I ventured to assign the priority of production; and expressed the opinion that, in character of composition and in the manner of execution, the xylographic designs in this first edition bore a distinctive resemblance to the Helglein known to us as the "*Brussels Virgin*" and the "*Virgin of the Berlin Cabinet*," thus supporting the conclusion that they were inspired by the same influence and originated in the same locality. I then brought forward, if not actual, yet strong presumptive evidence that this locality was the Priory of Groenendael, in the Forest of Soignes, and that the skilful craftsmen who executed these illustrated works were members of the fraternity, the "*Fratres Vitæ Communæ*"—Brethren of the Common Life—who found there their home, and would avail themselves of the guidance of such youthful artists of the early Flemish school who, in accordance with recognized religious practice, made in that monastery their occasional retreat. In this, my third address, I proceed to consider a further advance made in the construction of the blockbooks which led directly to the practice of type-printing, and then discuss the claims put forward on behalf of those to whom the invention has been attributed.]

THE blockbook which I am about to describe, the "*Speculum Humanæ Salvationis*," is a work which holds a very important position in the history

of printing. It occupies an intermediate place between books wholly executed, both as to illustration and text, by the wood-engraver, and books in which the text was produced, no longer from the engraved block, but by means of moveable type.

The "Speculum," in its completed state, is a small folio. As in the earliest blockbooks, the successive sheets were printed only on one side, and were so arranged by the binder that the two printed pages should be opposite to one another. The work, which is preceded by a Preface entirely in text, has, in the upper part of each illustrated page, a wood-engraving, divided into two arched compartments, separated by a pillar, with a design on either side, the subject taken mostly from some event described in the Old or New Testament; and within the lower margin of each is a short Latin inscription also engraved upon the block. Below the designs are two columns of text referring to the subject of the illustrations. The reason why the pages were printed only on one side was because, as with the earlier blockbooks, the impressions were taken off by friction or rubbing, and thus could not be printed on both sides of the paper, since the process employed for printing on the verso would have seriously injured the illustration already impressed upon the recto of the page.

The subjects, printed in distemper, are mostly Biblical, some taken from traditionary or legendary Church History, others are mythological. Thus the

first of the illustrations represents, on the left hand, the Presentation of the Virgin Mary in the Temple ; on the right is a legendary scene intended as a prefiguration of the Presentation, the offering of the golden table in the temple of the Sun-god. The tale is that three fishermen (two only are pictured in this composition) cast their net into the sea, and when they drew it found, not fish, but a precious golden table. This they carried to a neighbouring temple, and there presented it.*

Copies of the "Speculum" had previously appeared in manuscript form, some only in text, others with written text and hand-drawn and coloured illustrations, several of which have been preserved. There is one in the Imperial Library at Vienna which has been assigned to the later fourteenth century. Another, unfortunately in very incomplete condition, is in the National Library at Paris, interesting as affording a probable date for the conception of the work. It is a small folio consisting of only eighteen leaves, the first page having an ornamental border. The text commences : *Incipit prohemium cujusdam nove compilationis edite sub anno millesimo CCC. 24. nomen nostri auctoris humilitate siletur, et titulo sive nomen operis est speculum humanæ salvationis*, etc. Another, a manuscript upon vellum, is in the Library of the Arsenal. It has forty-two leaves, on forty of which are coloured illuminations of artistic character, in

* Didron, Vol. II., page 211.

which some authorities have recognized the influence, if not the hand, of Giotto di Bondone, or possibly of Taddeo Gaddi.* Other manuscripts are recorded; four are in the British Museum, one of them bearing the date 1379, and, as we learn from Sotheby, one is in the Douce collection in the Bodleian at Oxford, "which, as far as subject 104, *Jonah swallowed by the Whale*, is conformable to the printed copy."

The manuscript, when complete, should contain the designs of 192 subjects, *i.e.* should have 96 pages, with two designs and two columns of text on every page; whereas the first printed editions have only 58 pages with illustrations, that is, with 116 designs. The text of the printed editions was taken from the manuscripts, and the subjects of the illustrations were represented upon the woodblocks: we do not say that any of them are actual *copies*; the idea only was borrowed, and the engravings executed from original drawings.

Of the printed "*Speculum*" four early editions are known. Two of these have the text in Latin, in prose, not verse, but with rhythmical termination to the lines; two editions are in Dutch. The two Latin editions have each fifty-eight leaves with illustrations, printed, as I have said, only on one side of the page, and preceded by a Preface consisting of five leaves of text, without illustrations, also printed

* Dutuit's "*Manuel*," Vol. I., Part I.

only on one side ; these editions have therefore sixty-three printed leaves in all. The two Dutch editions have the same number of leaves with illustrations as the Latin, but have four leaves of Preface instead of five, making in all sixty-two printed leaves.

There is much difference of opinion as to the order in which these editions were produced, as also whether the printing of the woodcut illustrations preceded or followed the printing of the text. In each of the editions we observe some distinctive variations. The two with Latin text we will distinguish as A and B ; the two with the text in Dutch as C and D. This sequence, you will understand, has no reference whatever to the order in which the editions were produced ; it is simply used for convenience.

Latin Edition, A.—The five pages of Preface printed from moveable type. Twenty illustrated pages have the entire text printed from engraved woodblocks. The text in the remainder of the work is printed from type of the same fount as used in the Preface.

Latin Edition, B.—The whole of the text, including Preface, is printed from moveable type. The fount similar in form, but a little sharper than that used for edition A.

Dutch Edition, C.—The text, including Preface, printed throughout from the same fount of type, with the exception of two pages, the 45th and the 56th, which are printed from a different fount.

Dutch Edition, .D.—The whole text, including Preface, printed from a different and smaller type than the types used in C.

The question now arises, to which of these four editions must we assign the precedence? If no other reasons, for or against, could be adduced, the natural conclusion would be that the edition A, that is, the edition with the twenty pages of xylographic text, was the first, the earliest edition; and that, when it was yet in hand, and twenty pages of engraved text had been completed, the practical use of moveable type was introduced; that its superior advantage over engraved blockwork was at once recognized, and accordingly, for the remainder of the work, and also for the Preface—generally composed, as authors are aware, after the book has been completed—type was set up, and with this the remainder of the work was printed. Those engaged in the production of the book would not throw aside the engraved blocks with which they had commenced their labour, but would gladly avail themselves of the new invention, which would enable them to carry it forward more easily.

I am well aware that this decision has not been universally accepted, and that while it is supported by Heineken and Berjeau, and more recently by Dr. Willshire and M. Eugene Dutuit, on the other side are Sotheby, Ottley, Dibdin, and Chatto, who

maintain that the edition A, with the twenty blocks of xylographic text, was the third, perhaps even the fourth, but certainly it was not the first edition.

Sotheby founds his argument on the possibility of some accident having happened to the type while the edition A was passing through the press, and suggests that to complete his work the printer had recourse to the wood-engraver, as entailing less expense than he would have incurred by having new types cast;* and further, "From the great beauty and sharpness of the type of the *first* edition [*i.e.* what we have described at Latin edition B], which . . . is equal in brilliancy to that of the Mentz or Mazarine Bible, it is evident that a *new type* had been cast for the original printing of the work"; and he regards the type in what he describes as the third edition, *i.e.* the edition A, in which are the twenty blocks of xylographic text, as showing signs of wear. I do not myself accept this conclusion. I think it quite possible that the type used in the Latin edition B was a new fount, that both this and the type used for edition A were copied from the same manuscript, but that the work for edition B was more skilfully executed.

* Sotheby, "Principia," Vol. I., page 162. Some have suggested that a dishonest workman purloined the type while the printer was engaged upon the new edition, and that his only alternative was to create fresh type, which would have caused serious delay, or have the text required for the completion of the work engraved upon woodblocks.

But this is not all ; other questions have arisen, and before we decide on the order in which the different editions were produced we must enter further into the matter.

And first, to what date should we assign the illustrations? and next, were the illustrations designed and impressed upon the several pages before the text was printed, or did the printing of the text precede the printing of the illustrations?

Sotheby in his "Principia" gives not only his own conclusions, but also those of a practical printer, before whom had been placed an edition known as "the Inglis copy" (edition B as described above). Shortly, they are as follows:—

1. That the "Speculum" must have been printed from a press similar to the common wooden presses now in use.

2. That the wood-engravings—they are rarely found parallel or in a line with the heads of the text—were taken off by friction, *subsequently* to the printing of the letterpress. He contends that this is shown by the gloss or shining appearance remaining on the backs of the impressions, as is seen in most of the examples of the blockbooks taken off by friction; and says that if the impressions from the blocks had been first printed, that gloss would have been nearly if not entirely obliterated by the operation of wetting the paper for the impression of the type. For my own part, I cannot agree with either of these

conclusions. The second, as you see, depends on our acceptance of the first; moreover, the appearance which the paper of a single example may now present is hardly a sufficient ground on which to establish a conclusion which affects the whole edition of a work printed, say, some 450 years ago, and which may have been subjected in its earlier and even later days to very careless treatment; while his contention that the wood-engravings were taken off subsequently to the printing of the text is one which we regard as entirely untenable. But there is a further question to be considered.

What is the date we should assign to these illustrations? Ottley in his "Invention of Printing" writes:—

Whatever the date of the cuts may be, it may fairly be maintained that the printer, *before he caused them to be commenced* [the italics are my own], was so far practised in the art of printing with moveable characters, as to feel himself competent to print the text underneath them in that manner.

On the following page he says:—

This series of wood-engravings must have been a work of great labour and expense, and could only have been undertaken as decorations to an intended printed book, which by the sale of numerous copies might reasonably be expected to remunerate the printer and the artist. From the degree of study exhibited in the designs of many of them, and the extraordinary diligence with which they are engraved, it cannot be doubted that some years were employed in their execution.

The decision therefore of these authorities, Sotheby and Ottley, is this—that the idea of producing a printed edition of the “Speculum” was not entertained until the invention of printing by means of moveable type was so far advanced as to have become a recognized process ; that the designs for the illustrations and their execution upon the woodblocks were then put in hand, a task which they suppose must have taken some considerable time ; that, after their completion, the text which should appear below them was set up in type. The only point on which they are not agreed is as to whether the text or the illustrations were first impressed upon the pages.

On a later page of his work Ottley refers to a very interesting correspondence he had had with Sir Samuel Meyrick, a gentleman well known as an authority on mediæval costume and armour, as to the exact period which should be assigned to the designs which appear in the illustrations. Sir Samuel, in reply, enters minutely into the subject, and though he does not pledge himself to an absolute decision, he says that, after a careful review and consideration of the whole question, he is “inclined to think that the woodblocks of the ‘Speculum’ cannot be of a later date than 1435, and that they may be a little earlier.” We should ourselves assign them to about 1430. With the arguments adduced by that distinguished specialist in support of his opinions Ottley

does not entirely agree. He acknowledges, as Sir Samuel Meyrick contends, that the artist who drew these designs had "long been accustomed to see around him people clothed in the costume and wearing the armour which he has so ably depicted, and so presents us with a just conception of what was the costume and armour in Holland at that period." Yet, for reasons which he considers sufficient, he would assign the whole work to a later date than Sir Samuel has suggested, and believes that *the work was commenced* (you will observe, he does not say *completed*) *within a few years of the period Meyrick has supposed, and certainly not later than 1450.*

The reasons which Ottley deemed sufficient to justify his conclusion that the illustrations should be attributed to a later date are founded, not so much on any divergence of opinion regarding armour and costume, as on the inferences to be drawn from distinctive variations in the text and in the woodcuts in the different editions. And first with regard to the text, he tells us that in one of the Dutch editions, preserved in the library at Lisle, the text of two of the leaves is printed, of course by the printing press, on both sides, but the woodcuts are only upon one side; thus "proving that the printer knew very well how to print on both sides of his paper, and he was only prevented from doing so, throughout the entire work, by the nature of the process to be used in

taking off the cuts at the top of the pages after the text was printed." Ottley does not say that he had himself examined this copy, but he refers to it on the authority of Scriverius; we entertain no doubt as to its existence, and we may accept the statement, since we do not know how much later than that which we consider the first edition this Dutch edition may have been produced. It was printed, as were both the Dutch editions, from moveable type, and with the press, which had then come into use; and the fact that, in one copy of the edition, the text has been impressed on the verso of two of the pages, on which both illustrations and text had been printed, is a matter of very little importance, and has no connection with our argument. He says, too, that the form of lettering which appears in the twenty block-printed pages of one Latin edition was executed in imitation of the moveable type which is used in the other Latin edition. I should say, on the contrary, that the character and form of type was carefully copied in the second from the xylograph blocks, or that both were in close imitation of some special manuscript.

Ottley has carried his investigations further, and endeavours to prove that the variations—what we should call the different "states" found in successive impressions of the woodcuts—afford unquestionable evidence of the order in which the four editions were issued. He therefore sets aside the arrangement

which had hitherto been accepted, and places them as follows :—

1. Latin edition (B), with the whole type in moveable text.
2. Dutch edition (C), in same type, except the two pages 45 and 56.
3. Latin edition (A), with twenty pages of text from engraved woodblocks.
4. Dutch edition (D), printed in different and smaller type.

The evidence on which he founded his decision is this: he carefully compared the woodcuts in edition A, which had been regarded as the first, with the woodcuts in C, the Dutch edition, called the second, and discovered variations which satisfactorily proved that the impressions in C had been taken off before the impressions which appear in A. "Certain little pieces of the engraved blocks, some of them in the central part of the composition, had been broken away by the operation of printing, whereas, in the Dutch copy, the impressions of those little pieces were complete." He then gives a series of facsimiles in which these variations are reproduced.

As you are aware, the designs upon a block engraved for the purpose of producing impressions were executed "in relief"—*i.e.* the composition was first drawn upon the block, and then such parts as should appear white or colourless were cut away, so that the lines which form the composition would stand in

prominent lines or ridges. It does not need a practised wood-engraver to teach us that any weakness or unsoundness in these ridges, more especially when the incisions in the wood were made in the direction of the grain, as was then the practice, would speedily show itself when impressions were being taken off. If therefore a series of impressions from the same block are placed before us, and we notice that while some are perfect others show defeatures, such as could not be accounted for by imperfect inking or printing, we should be perfectly justified in deciding which impressions were first printed and which were printed later.

But this is not sufficient to decide the actual sequence in which the completed editions made their appearance. We are dealing with a work containing text and illustrations. There is no doubt whatever that these were printed separately: they show the use of a different coloured ink, the illustrations being printed in a brown distemper, and produced, as seen by the gloss, by rubbing the back of the paper when placed face downwards upon the block; the text, with the exception of the twenty xylographic pages in edition A, is printed in black oleaginous ink, in some rude kind of press; and what is equally conclusive is the fact, to which we have before referred, that the engravings are rarely found parallel or in a line with the headlines of the text below. We may also affirm that the illustrations were first

executed and impressed upon the paper, and that the text was completed and printed afterwards. Our conclusion is founded on the expressed opinion of Sir Samuel Meyrick, that the designs cannot be later and may be earlier than 1435, while we are unable to assign the practical use of moveable type, which you know appears in each of these editions, to so early a date. And then, with regard to the argument that the occurrence of earlier and later "states" of the impressions in the different editions affords unquestionable evidence as to the order in which these editions were produced, we must say that we do not accept such evidence as entirely satisfactory, and our reasons are these :—

First of all, we do not suppose that when the work was contemplated it was intended to confine it to a single Latin edition ; on the contrary, we believe its authors proposed to issue it, with its instructive illustrations, both in Latin and in Dutch ; and, as we have said, we place its conception at least as early as 1430, at a date when type-printing was unknown, and at about the time when the production of blockbooks had become a part of the regular work of the inmates of the Scriptorium. The idea of the illustrations which formed the more important part of these books was not artistic, but purely educational ; careful observation reveals occasional and suggestive artistic influence, but such did not enter into the intention of those who conceived the work.

They were not creating designs for the enjoyment of the critic or the connoisseur, but pictured scenes which should arouse the attention of those whom they would instruct in the principles of religious life.

The completed book, you will remember, consists of Preface, and of 58 leaves with illustrations. The arrangement shows that each of the two leaves facing one another were formed of one sheet; thus there would be 29 sheets, and on each sheet two woodcuts. We do not know how many copies the projectors of the book proposed to issue—suppose we say 100, *i.e.* 50 in Latin and 50 in Dutch; we are probably very much within the mark. The sheets on which the illustrations were impressed would first be exposed until they had dried, and be afterwards made up into 29 bundles or parcels, 100 impressions in each, to await the further printing of the text. The superior value of the first “states” of an impression of purely artistic character was hardly recognized even by connoisseurs in those early days, and certainly would not be regarded by either the producer or the printers of the ruder impressions of the “Speculum”; and surely it requires no stretch of imagination to suppose that, when thus placed together, the later printed sheets might lie at the top of each parcel, or possibly the whole of the impressions from each recently printed block be indiscriminately mixed; and thus the occurrence of impressions of a later “state,” appearing in what we

believe to have been the first edition of the completed book, is accounted for. In fact, the assumption that they would be carefully arranged in the exact order in which the impressions had been taken is, to my mind, much more imaginative than that they should have been used just as they came to hand.

Who was it who said, "The songs which the Sirens sung, and the name by which Achilles was known among the daughters of Lycomedes, are nowhere recorded, *but they are not beyond the region of conjecture*"? Even in our present prosaic studies we must occasionally trespass within that region; but we trust that we have not wandered so far as have those estimable authorities with whom we have ventured to disagree. I may add that it was not until some time after I had formed my conclusions that I discovered how entirely they were in accordance with the opinions expressed by M. Eugene Dutuit. I found that he had made special reference to what Ottley says respecting the worn condition of the blocks, as showing the successive "states" of the impressions, but did not regard the occurrence of such states as any evidence as to sequence of editions, and adds:—

Or si, comme on pense, on a du coup tiré les gravures en nombre suffisant pour la publication de plusieurs éditions, il n'y a aucune possibilité de fixer l'ordre des éditions par l'état plus ou moins fatigué des épreuves, les

meilleures ayant pu être employées en second, troisième ou dernier lieu, ou bien d'une façon absolument irrégulière.*

As to the country in which this most interesting blockbook was produced, there can be but one opinion. The fact that the text of one of the two earlier editions is in Dutch † renders further argument unnecessary. When we say Dutch, of course we do not mean the tongue of the present day, but the language as it was spoken more than 450 years ago ; and it is a question, which I have not yet been able to solve, whether at that time this was not the language generally in use in what we describe as "the Low Countries," including Flanders, Brabant, and Holland, an area defined in a modern atlas as "Belgium and the Netherlands." Whether it was the work of the Brethren of the Common Life, and proceeded, as we believe some of the earlier blockbooks had done, from the Monastery of Groenendael, can only be a matter of inference. At the time its first edition was issued the construction of these illustrated books had become more or less popular, and, as some writers assert, their production was not confined to the Scriptorium of the religious houses, but was taken up by craftsmen in the larger towns under the patronage of the civic authorities. That a work of purely religious character should have

* "Manuel de l'Amateur d'Estampes," Vol. I.

† Heineken, when describing the book, describes the text as "Flemish."

been created within the walls of a monastery, and under the direction of the Superior, is much more probable than that it should have been undertaken elsewhere, and I think we are justified in assuming that at least the two earlier editions, the first Latin and the first Dutch, editions A and C, were produced within the Scriptorium of the priory.

The blockbook known as the "Canticum Cantorum," to which I would next direct your attention, has for us a special interest, quite apart from its subject and the character of its designs. We have already brought into review the most important of the xylographic works which preceded the invention of type-printing. We have described the "Speculum," which marks the period of transition, for which the whole of the designs had some time previously been impressed, and twenty pages of xylographic text produced, if not before the date of the new discovery, yet before its practical advantages had been recognized; and have shown how the text of that first edition was completed, and the entire text of three successive editions was produced, by means of moveable type. The "Canticum" may be placed next in succession, since we regard it as the first of the blockbooks which appeared after the "invention," and in which it was intended that whatever text was used should be imprinted from type.

The work is in small square folio, consisting of



Plate I. of the CANTICUM CANTICORUM
(First Edition).

eight sheets, with four designs upon each sheet, printed by friction on one side only of the paper ; for the completed book each sheet was folded down the middle, with the designs facing each other, the reverse of each leaf being left blank. The title which in later years has been given to the work, "*Historia seu Providentia Virginis Mariæ ex Cantico Canticorum*," does not convey a correct description of its contents, since the evident intention of the designs, and the explanatory or suggestive text introduced upon the scrolls, was to furnish "an allegorical adaptation of the Song of Solomon descriptive of the love of Christ for His Church." Thus in the design on the upper part of the first page, of which we show a reproduction, though on a smaller scale than the original (Plate VIII.), Christ is represented conducting a crowned female figure, emblematic of the Church, accompanied by her bridesmaids ; behind them is a monastic building,* while in front, to the right, is a fenced-in garden, with lay-brothers gathering in the harvest ; and on the scroll which is placed in the centre of the composition is, in Latin text, a quotation from the first verse of the fifth chapter of

* Is it possible that this introduction of a monastic building, and the scene representing monks gathering in the harvest, have a reference to the Priory of Groenendael? We know that manual labour was among the duties of the brethren ; the character of their clothing has been described as consisting of a long grey dress with large hood, resembling that of the figure wielding a flail in the foreground ; we observe too that his hair, as that of the brethren, is "closely cropped in a circular form."

the Song of Solomon: "I am come into my garden, my sister, my spouse; I have gathered my myrrh with my spice." In the lower design, upon the right appears an uncrowned figure, emblematic of the Church on earth, pleading her cause with "the daughters of Jerusalem," who are grouped together on the left. Her petition is printed within the scroll: *Nigra sum*, etc.,—"I am black, but comely, O ye daughters of Jerusalem, as the tents of Kedar, as the curtains of Solomon" (Cap. I., v. 5). The reply of those to whom she appeals commences *Caput tuum*, etc.,—"Thine head upon thee is like Carmel, and the hair of thine head like purple" (Cap. VII., v. 5); and, as assurance of the glory that awaits her, between them appears in a vision the Church in glory, the same figure which is represented in the composition above, crowned and with a nimbus around her head, but now rising from the ground and surrounded by an elliptical aureole. Undoubtedly the compositions are somewhat fanciful, and it may be that the suggestive explanation given by Sotheby, by Chatto, and others is not entirely imaginative. They contend that fully one-third of these pictured designs are not so much illustrative of the Song of Solomon, or allegorical representations of the spiritual connection between Christ and His Church, but were intended to record the serious divergences of opinion which had been aroused years before, and in that day prevailed within the Church itself. It

is possible there may have been such intention. In the earlier years of the fifteenth century, the Latin Church was divided into two great factions, under the rule of rival Popes, and it was not until the ascent of Nicolas V. to the Papal Chair, A.D. 1449, that anything approaching union was attained. It has been assumed that the scenes which illuminate the final page symbolize the termination of the schism which had so long prevailed. In the upper composition Christ is seated, addressing the Church, who is now kneeling before Him ; in the lower, He invites the Church to ascend with Him to Lebanon, such retreat implying deliverance from all future conflict and danger, and that she will there receive His crown of glory.

It is not, however, the intention of this work which immediately concerns us, but its technical character. Dibdin ("Bibl. Spenceriana," Vol. I., page xlii) contends that the impressions were not taken from engraved woodblocks, but from engraved metal—not copper, but an amalgam of tin and pewter. He founds his argument on examination of the example of the "Canticum" in the Spencer (now the Rylands) Library, in which he notices the very prominent ridges which appear on the reverse of the illustrations, in some cases piercing almost through the paper, and concludes "that the material on which they were executed must have been of some stouter substance than that of wood." Ottley, on the other hand,

asserts that the engravings were on wood, since he observed, in the same copy, distinct traces of a breakage across the block, extending across the first two pages. There is an example of this edition of the "Canticum" in the British Museum in which similar breakages may be seen. A more important question is, whether the lettering on the scrolls was produced from the engraved block or metal plate, or whether it was printed from inserted metal types, arranged and then wedged together into the incised plate or block. For my own part, I am satisfied that this latter method was that by which the text was produced, and that it was not impressed from the engraved block.

This conclusion enables us to assign a probable date to the work. Sotheby places it about 1445. Passavant, believing that he sees in the character of the figures and their singularly elongated forms the influence of the school of Dierick Bouts, brings it down to 1464. Jackson and Chatto (page 73, 1851 edition) invite attention to the resemblance which many of the female figures bear to the designs of Schoengauer, and in this they are supported by Dr. Willshire (Vol. I., page 297). Born at Augsburg in or about 1420, Schoengauer had practised drawing and goldsmith-engraving for some time before he commenced engraving on metal for the production of such signed impressions of his prints as have reached us. If the designs were by his hand, we should perhaps attribute

the entire work rather to the German than to the Flemish school, although Galichon (*Gazette des Beaux-Arts*, 1859) regards Schoengauer's earlier compositions as evincing rather the influence of the school of Bruges.

But Galichon's conclusion is, I think, somewhat suggestive of another influence than that of Schoengauer. May we not see in these illustrations a manner of composition which more or less prevailed among the artists of the Low Countries? Between Bruges and Brussels, in such archaic work, the distinction might not be very decisive. Is it possible that, as in other blockbooks, the designs may be attributed to the school of Roger van der Weyden? In describing the character of the composition in pictures by Van der Weyden, Messrs. Crowe and Cavalcaselle, in their "Early Flemish Painters," page 186 (Murray, 1879 edition), remark: "A strange peculiarity marks the foregrounds; the figures are made to rest on a barren rocky surface, in the interstices of which a hardy plant at times crops out." You will observe a like peculiarity in the foreground of several of the xylographic illustrations of the "Canticum," in some of the plates so distinctive as almost to divert attention from the subject of the picture.

However this may be, we cannot assign to the "Canticum" an earlier date than that to which we attribute the invention of type-printing, but should regard it as of more recent execution, say of or

about 1450, or not later than 1455. We know that the creation of entirely xylographic books was occasionally practised some years after the introduction of printing from moveable type. Several examples have been preserved; among them is a "Mirabilia Roma," from which an illustration is given by Humphreys in his "Art of Printing," Plate VII., and a second reproduction from the first page of the text by Mr. Gordon Duff ("Early Printed Books," page 11). It is a German work, and was executed about 1472. A still later blockbook, the "Opera Nova," is believed to have been executed in Vienna in 1510. It is worthy of remark that, in each of these examples, the text is engraved, not in imitation of type, but of early manuscript, thus preserving a similarity of character with the blockbooks produced in the earlier years of the fifteenth century.

In recording the steps which led to the "Invention of Printing," it has been my endeavour to place before you as fully, yet as succinctly as I can, whatever evidence may be gained, or presumable inference be suggested, as to the country and the particular locality to which the earliest manufacture of moveable type and its practical application may be assigned, and to whom we may attribute the distinction of having introduced a process which resulted in such enormous advantage to the world of literature. I am aware that the conclusions to which I

have invited your attention are not such as have been generally accepted. The controversy—and we know that from comparatively early times it has been a somewhat animated one—has mostly been limited to the precedence of certain specified localities, and to the rival claims on behalf of printers with whose names, as the assumed inventors of the art, we are all more or less familiar; and in reference to our subject it is still a question of no little importance.

On one side are the advocates of Haarlem and Laurens Coster, on another are ranged the supporters of Mayence and Gutenberg. The priority of Antwerp as a centre of printing, or again of Bruges or of Brussels, has also been advanced. The honour has in recent years been claimed for the town of Feltre, in North Italy, while so early as 1471 the Italian author of an edition of the “*Institutiones Quintiliani*,” who rejoices in the Latinized cognomen of *Omnibonus Leonicensis*, prefaces his work by a statement, uncontradicted by Nicolas Jenson, his printer, that he, Jenson, who had established his press in Venice, was the actual inventor of the use of moveable type—*qui librariæ artis mirabilis inventor: non ut scribantur calamo libri, sed veluti gemma imprimatur*. It has been suggested that the author of this statement meant only that it was Jenson who first introduced the newly discovered art into Italy. However this may be, it certainly was not

so supposed in early days; since we find that some years afterwards the assertion was directly contradicted by Ulrich Zell,* on whose authority Johan Koelhof, the printer of the "Cologne Chronicle" (1499), gives an account of the invention (folio 311), which reads as follows. I copy the translation from Ottley, "Invention of Printing," pages 6, 7:—

This most important art was first found out in Germany, at Mentz on the Rhyne. And it is a great honour to the German nation that such ingenious men were found in it. This took place about the year of our Lord M.CCCC.XL., and from that time to the year L. this art and whatever appertains to it were rendered more perfect. And in the year M.CCCC.L., which was a jubilee year, they began to print; and the first book that was printed was the Bible in Latin, and it was printed with larger characters than those which are now used for printing Missals. Item: although this art, as we have said, was found out at Mentz in the way in which it is now commonly used, nevertheless the prototype of it ("*vurbildung*," *præfiguratio*) was found in Holland, in the "Donatuses" (*den Donaten*) which had been before printed there; and it is from and out of these that the beginning of this art was taken.

And then, after referring to the statement made by Omnibonus Leonicensis, which he says "is clearly not true," he asserts that

* Ulrich Zell was the first to introduce the art of printing into Cologne. The earliest recorded work which bears his name, with the date 1466, was an edition of the writings of St. Chrysostom (Hain, 5032). A copy of the "Cologne Chronicle" is in the Trinity College Library, as is also a copy of the "Institutiones Quintiliani," containing the Preface by Omnibonus Leonicensis.

The first inventor of printing was a citizen of Mentz born at Strasburg, called Johan Gudenburch, Gentleman. Item: the said art was first carried to Cologne, then to Strasburg, and then to Venice.

It is interesting to know that Ulrich Zell was a member of the religious order of the Brethren of the Common Life. His last printed work—he had issued about 135 in all—was published in 1494, at least this is his final work which bears a date. He had retired from business, but was still living, when Koelhof wrote the passage we have quoted.

We are satisfied that Ulrich Zell stated what he believed to be correct; the only question (as suggested by Ottley) is whether he intended to speak of these Donatuses as having been printed from engraved blocks of wood, or with moveable type. Moreover, as Mr. Gordon Duff in his "Early Printed Books" pointedly observes, the facts recorded by the compiler of the "Chronicle" are derived from various sources, and are sometimes erroneous. "Evidence which on certain points is inaccurate cannot be implicitly trusted on other points." We must therefore seek for information elsewhere.

But now with regard to the claims put forward in favour of Haarlem and Laurens Coster.

A careful summary of the conflicting evidence, and of the conclusions to which contending writers had arrived, was undertaken by W. Young Ottley in his "Invention of Printing"—a work which he had

commenced some time before, but which was not published until about twenty-five years after his death, which took place in 1836. It is prefaced by an Introduction by Berjeau, who directs attention to the fact that Ottley writes with a certain prejudice in favour of the claims of Laurens Coster as "the Inventor of Typography." An account of the controversy appears in Jackson and Chatto (1st edition, page 199), who say that a critical examination of the presumed evidence on behalf of Coster shows that the claim on his behalf is untenable. A still more careful *résumé* of the arguments appears in M. Eugene Dutuit's "Manuel d'Estampes," Vol. I., page 220.

The history is this. A Dutch historian, Adrian de Jonghe, *i.e.* Adrian the Younger (surnames, you know, were not general in earlier days), his name Latinized into Hadrian Junius, composed, in or about 1565 to 1569, a work entitled "Batavia," which, however, was not published until about 1588, some years after his decease.

In that work he relates a "tradition" which he tells us "had been handed down by various aged men of the highest respectability, who had themselves received it from others of equal credit, as a lighted torch is passed from one hand to another without being extinguished." It is to the effect that just 128 years before, that would be in 1440, one Laurens Janszoon, *i.e.* Laurens the son of Jan,

surnamed Coster from the honourable position he held as custodian of the great Church of Saint Bavon at Haarlem, his native town, one afternoon, when wandering in the fields, amused himself by cutting out forms of letters from the bark of a beech-tree, and from these he impressed words or short sentences upon paper "for the amusement and instruction of his grandchildren"; that the attempt proving successful, he was led to still further experiments: "Finding the ink then commonly used was apt to spread, he, with the help of his son-in-law, Thomas the son of Peter, invented ink of a more glutinous kind, with which he succeeded in printing entire pages both of woodcuts and of letterpress." He further tells us that Coster printed on one side only of the leaf, the other side being left blank, intending that the blank pages should be pasted together, and thus the printed pages might be consecutive as in ordinary manuscript books. Junius goes on to say that the book thus produced was that known as the "*Speculum Nostræ Salutis*," a work written by an anonymous author in the Dutch language; that, after this was completed, Laurens made letters of metal instead of wood; and, as the business he had thus commenced increased, took skilful workmen into his employ, to assist him in carrying on his new discovery—which circumstance proved the first cause of disaster to the establishment, for that one of his workmen, taking advantage of his master's absence,

availed himself of the opportunity, robbing him of the type and implements he was using in his art, escaping with his booty first to Amsterdam, and afterwards to Cologne, finally taking up his residence at Mayence, where he established a press, from which, in the following year, he issued a work entitled "Alexandri Galli Doctrinale," which, as also another, "Petri Hispani Tractatus," he printed with the same type as that which had before been used by his master, Laurens Coster, at Haarlem. The "Alexandri Galli" is catalogued by Hain (664), who had, however, never seen the book; but, no doubt in deference to the statement of Hadrian Junius, adds, in a suggestive parenthesis, that it is said to be printed in the type of Laurens Coster of Haarlem: *Litteris, quibus libri officinae Harlemensi Laurentii Jansoen attributi*. Ottley in his "Invention of Printing" relates the history, as given by Koning in his work on the "Origin of Printing" (Amsterdam, 1819), who asserts that fragments of this "grammatical poem" were still in existence, and in the possession of M. Renouard of Paris, as also other fragments in the Royal Library at the Hague. Of the "Petri Hispani Tractatus," the other printed book attributed to Laurens Coster's dishonest workman, I find no record, nor any allusion to it by other writers which might lead to its identification.

The legend recorded by Hadrian Junius includes, as you see, two distinct assertions: 1st, that the

art of printing with moveable types originated in Haarlem; and 2nd, that of this art Laurens Coster was the inventor. The Haarlem tradition may have originated earlier, but we can find no trace of it beyond the assertion of Ulrich Zell in regard to the Donati, a statement repeated with unimportant variations by later writers, as, for instance, in a manuscript note on the first page of a Donatus, perhaps still preserved in the Vatican Library, and assigned to the year 1510 or thereabouts, ending *Hæc scripsit Mariangelus Accursius*; but it cannot be accepted as evidence. In 1563 a Dutch edition of "Cicero de Officiis" was printed at Haarlem by Dierich Coornhert, in which it is asserted that the art of type-printing was first discovered in Haarlem—that it was somewhat rudely executed, but that the invention being carried to Mentz by a treacherous workman was quickly improved, and, as that city had the honour of making the art known, it was generally supposed to have originated there.

The Haarlem tradition was again repeated by Jan van Zuyren, in some work of which the title is not given, and again in 1567 by Louis Guicciardini in a history of Holland. In 1573 Georges Bruyn, a Canon of the Church of Notre Dame in Cologne, says, in his "Civitates Orbis Terrarum," that it had been an unbroken tradition in Haarlem that the art of printing was there first practised. In the year following Abraham Ortelius, in his "Theatrum

Orbis Terrarum" (Antwerp, 1574), repeats the assertion. Later on Michael von Eytzig, an Austrian nobleman and author, in his "*Leo Belgicus*," printed 1584, says the art as then practised was discovered in the city of Haarlem—the printing being effected with letters or types, on paper or other material—and that after the death of the inventor the secret was divulged by one of his workmen, and carried to great perfection in Mentz.

Further evidence appears in the works of later writers in support of the theory of Junius, but their conclusions are mostly founded on the assertions of those who had preceded them. The most important of these was a German, Mathias Quadt, who wrote a "*Biographical History of his most distinguished countrymen*." He is best known to us as a student in the art of engraving and of the production of prints, and as such is referred to by Bartsch in the Preface to his Catalogue of the works of Franz van Bocholt. Mathias Quadt's book was not published until after his death in 1595. He tells us that, according to the best authorities, the art of typography was invented at Haarlem, that the inventor—he does not give his name—died before he had perfected his discovery, and that a workman in his employment, after the death of his master, left Haarlem for Mayence, and there carried out the art to its perfection; and thus, says Mathias Quadt, while "Mayence was the nurse, Haarlem was the mother of typography."

There is sufficient similarity in these statements to justify us in assigning them to some common origin; but a few years after the publication of Mathias Quadts "Biographical History," the legend was still further improved upon. In 1601 Jean François le Petit, Recorder of Bethune in the Province of Artois, issued a work entitled a "Chronicle of Holland," in which he not only repeats the Coster and Haarlem legend as related by Junius, but supplements it by a very curious and interesting story. He tells us that Coster, "following the example of the Dutch merchants navigating in the Levant, had crossed the Isthmus of Suez, and, proceeding by the Red Sea, travelled as far as China. In his visit to that country he found some printed books, of which he obtained possession, without knowing how they had been produced, but from which afterwards he took the idea of type-printing," and then, reverting to the account he had borrowed from Hadrian Junius, says how "John the thief, when he had carried off Coster's type, took care to possess himself also of these books, and so transferred them into the hands of Gutenberg."

We may regard this statement about Coster and his travels as entirely fabulous, but from whence did François le Petit derive his ideas about early Chinese printing? Surely he was the fortunate possessor of the earliest German translation of Marco Polo, issued by Kreussner of Nuremburg in 1477, and of

which in the present day two copies only are known, one in the Spencer Collection, the other in the Imperial Library at Vienna ; or did he derive his inspiration from the Latin edition, printed presumably by Gerard de Leeu of Gouda in 1484, and of which the only copy I have yet seen is (No. 27) in the Trinity College Library? As, however, we absolutely reject the legend, we will not pursue the investigation.

The discussion as to the origin of the invention did not end here, though it was not until years afterwards it was vigorously renewed.

Throughout the first half of the last century the opinion was prevalent, at least in England, that the art of printing by means of moveable type was discovered by Laurens Coster at Haarlem, and brought to perfection by Gutenberg at Mentz. In 1765 appeared the "*Origines Typographicæ*" of Meerman. Taking as his text the work of Hadrian Junius, he repeated that writer's conclusions, but expressed his own further conviction that to Laurens Coster we are indebted for not only the publication but even the engraving of several of the blockbooks, especially attributing to him the Dutch edition of the "*Speculum*." Heinecken, writing in 1771, claims everything or almost everything relating to the invention for Germany, and assures us that the arts not only of printing but also of wood-cutting and copper-plate engraving originated and were

first practised in that country. He thus expresses himself:—

Although it be very indifferent, as regards the art itself, to know who was the first engraver; it cannot be uninteresting to the curious to know in what country they must look for the commencement of engraving: and I am convinced that those who search for it out of Germany will lose their labour.*

In 1768, *i.e.* about two hundred years after the time of Hadrian Junius and the publication of his history of the "Invention by Coster," another champion entered the field. This was Johannes Enschedius, a letter-founder and printer at Haarlem, who tells of his discovery of a very curious example of type-printing upon vellum, which after careful examination he himself, and others whose opinions he had invited, decided to be the identical "short sentences" mentioned by Hadrian Junius as having been printed by Laurens Coster from the type he had cut out from the bark of the beech-tree, "for the amusement and instruction of his grandchildren."

This unique example of typography, of which Meerman has given a facsimile in Vol. II. of his "Origines," and of which a reproduction was also produced by Enschedius, consists of eight small pages, each being about $1\frac{3}{4}$ inches high by a little more than $1\frac{1}{2}$ inches wide. The contents are an "Alphabet and some short Prayers in Latin." Chatto in his

* Otley, "Invention of Printing," page 67.

"History of Wood-Engraving" ventures to question the authenticity of this little work, and we may accept his arguments as conclusive, but I need not enter into particulars: it is sufficient to repeat his humorous and by no means hastily formed decision, that it is not produced by wooden types, nor can it even be accepted as a specimen of early printing; on the contrary, he considers it to be a "Dutch typographic essay on popular credulity," and as such we also may undoubtedly regard it.

One word more before we dismiss the Costerian legend. Hadrian Junius in his assertions with regard to Coster has fortunately given the date of the discovery with which he credits him. He says that it happened "128 years ago," *i.e.* in 1440. It is well to be exact. The archives of Haarlem of about that time have been carefully examined; the cognomen of "Laurens Janszoon" seems to have been a not unfrequent one—there must have been quite a family of that name. One Laurens Janszoon died 1439: he was not, however, a printer, but an innkeeper; much respected by his fellow-citizens, he rose to the rank of alderman and magistrate, and was also treasurer of a public hospital. Another Laurens Janszoon was a candle-maker; a third, still living in 1475, was, as the first, an innkeeper. There were others, but nothing whatever is recorded which can identify any one of them with the Janszoon of Junius; nor is there any mention of a Janszoon having held office as Sacristan

or Churchwarden of the Cathedral of St. Bavon, and who would be identified as Laurens Coster—*i.e.*, as we should translate the term Coster into its modern meaning, Laurens the custodian.

The legitimate—should I not say, the inevitable?—conclusion must be, not that Laurens Coster, whoever such person may have been, *invented printing*, but that Hadrian Junius . . . *invented Coster*.

But though we dismiss the Costerian legend, we cannot so readily decide as to the claims of Haarlem. Santander in his "Dictionnaire Bibliographique," published in Paris in 1805, considers that the claim of Haarlem is only "founded on vague reports and traditions which merit no belief"; he severely criticises the conclusions of Meerman, as well as what he terms "the fables of Junius," and entirely agrees with Heineken, that all the early books with xylographic figures *were originally engraved and printed in Germany*; that an early edition of the "Speculum" should have the text in the Dutch or in the Flemish tongue does not, he thinks, afford any evidence as to its origin, since there are frequent examples of such printing in German towns. He also asserts that the first edition was certainly not printed earlier than 1470, and believes that "every enlightened and impartial person" will see infinitely more reason to attribute this first edition to Veldener than to any other, since Veldener in 1483 reproduced,

from his press at Culenburch, a reprint of the "Speculum," using the same blocks which had served for previous editions, having had them sawn into pieces to adapt them to the smaller size of his new edition. Critics are proverbially unreasonable, and when they disagree with so learned a writer can be neither "enlightened nor impartial"; and this may explain my own entire inability to appreciate his conclusion that because, for his own purposes, Veldener mutilated the blocks of the "Speculum" in 1483, they must have been in his possession and the first edition been printed by him thirteen years before. We have the temerity to antedate that first edition by some forty years, and assume that the well-worn and much-used blocks had not passed into this printer's hands until about 1480. Santander concludes by supporting the claims of Mayence and of Gutenberg.

More recently, in 1819, an important work, compiled by Jacques Koning, was published at Amsterdam, under the auspices of "The Dutch Society of Arts and Sciences," in support of the ancient tradition that the art of printing was invented in Haarlem. The author, among other matters, gives a very interesting account of the watermarks in the paper used for the early blockbooks, and in the town registers and other documents preserved at the Hague, as also in ancient books of accounts in the Treasury at Haarlem, 1420—1441; and again, he enters into

the quality of the paper itself which was then in use, and inquires from whence it was procured, since no paper-mills at that time existed in Holland.* In a further chapter he calls attention "to the inconsistencies and contradictions into which Heinecken and Santander and other earlier writers had been betrayed," and, passing in review the consecutive steps which led to the invention—the early stamped playing cards, the Helglein or saint-pictures, the blockbooks containing figures and engraved text, then the engraving of letters on separate pieces of wood, and lastly, the manufacture of cast metal type—he insists that all these "discoveries were made, by degrees, at Haarlem."

The controversy has been carried on by writers of more recent date. Humphreys, whose first issue of the "History of Printing" appeared in 1867, while acknowledging the priority of Coster as the inventor of the art, contends that Gutenberg's "improvements in the types themselves, in his mode of casting, and his successful application of the system in the production of books, made the process, as he used it, entirely his own"; *inter alia*, he refers to a very curious record as to the prominent position assigned to Gutenberg which appears in certain "valuable manuscript notes to a series of devices of the French coinage, preserved in the Library of the Arsenal in

* It is suggested that the paper which found its market in Antwerp was manufactured at Brabant in Bavaria.

Paris," commencing: "On the 3rd of October, 1458, the King [that would be Charles VII.] having been informed that Sieur Gutenberg, Knight, living at Mayence in Germany, a man dexterous in making and engraving letter punches, had brought to light an invention for printing with metal characters," etc., and then tells how Nicolas Jenson, a practised goldsmith-engraver, who had been appointed Master of the Mint at Tours, his native town, was commissioned to investigate the matter, and also by open, or if necessary by surreptitious means, "*secrètement s'informer de la dite forme et invention*," to obtain possession of the secret. The "valuable manuscript notes" may have been inserted by a more recent hand, and so cannot be accepted as evidence, but they show that Sieur Gutenberg's name was held in repute as a printer at Mayence. And when we know that, notwithstanding the unsatisfactory termination of certain lawsuits in which he was engaged, and of which records have been preserved, he held a good social position as a gentleman of the Court of Adolf of Nassau, who in 1462 became Archbishop of Mentz, we may hold him in honour as certainly the most important if not the first printer in Mentz.

In 1871 Mr. J. H. Hessels issued a translation, from the Dutch, of a work by Dr. Van der Linde, entitled "The Haarlem Legend on the Invention of Printing." A second publication by Van der Linde appeared in 1878, in which he supports the

claim of Gutenberg as the inventor. This was followed, four years afterwards, by another work by Mr. Hessels, "An Historical Investigation" or "Criticism on Dr. Van der Linde's Gutenberg." The line that he has followed has been to treat all existing documents relating to Gutenberg in their chronological order, explaining their contents so far as he deems it necessary or desirable, stating when and where they were discovered or published, and reserving his own conclusions until the end. The "Historical Investigation" bears evidence of very careful research. We cannot enter at any length into the discussion, but we may remark that he founds his most important arguments on the character of the types used by the early printers in Mentz, not only disproving the theory to which some writers have given their adhesion as to the continuance of Gutenberg's printing office into the early years of the sixteenth century, but showing also that, through the acceptance of an erroneous date, certain publications which have been hitherto assigned to the press of Gutenberg must now be definitely withdrawn.

Perhaps the most interesting part of Mr. Hessels' book is the "Descriptive List of the Types and Works attributed to Gutenberg," to which he has devoted some forty pages. On pages 189, 190, he summarizes his conclusions, and what he says is worth recording, since it shows the difficulties which

we have to encounter in forming a decision. He writes:—

To conclude: the question, Was Gutenberg the inventor of printing? I must leave, to my great regret, unanswered, because all *data* for a decision are wanting. I believe I may state the result of my inquiry to be as follows. As early as November 15, 1454, *two* printers were at work in Mentz: the name of one of them *may* have been Johann Gutenberg (perhaps subsidized by Johann Fust), but *it is not stated anywhere*; the name of the other is, in all probability, Peter Schoeffer de Gernsheim. That the *latter* did not consider himself to have been the *first* or even the *chief* printer of Mentz seems sufficiently clear, from what we may call his own statement, in the imprint of the "Justinianus" of 24 May, 1468, in which he speaks of two Johannes, "*Librorum insignes prothocaragmatici quos genuit ambos urbs maguntina.*"* One of these Johannes must have been Johann Fust; who was the other? Everybody says Gutenberg, and I am in no position to contradict it. It is possible that Johann Mentelin, who printed at Strasburg already in 1460—we may even say 1459—may have been meant, but we know nothing of his residence in Mentz.

That *prothocaragmatici* does not necessarily mean the *first*, using the word in the sense of the *earliest* typographers, we know from the way in which *protho* was used in the later middle ages. It simply signifies

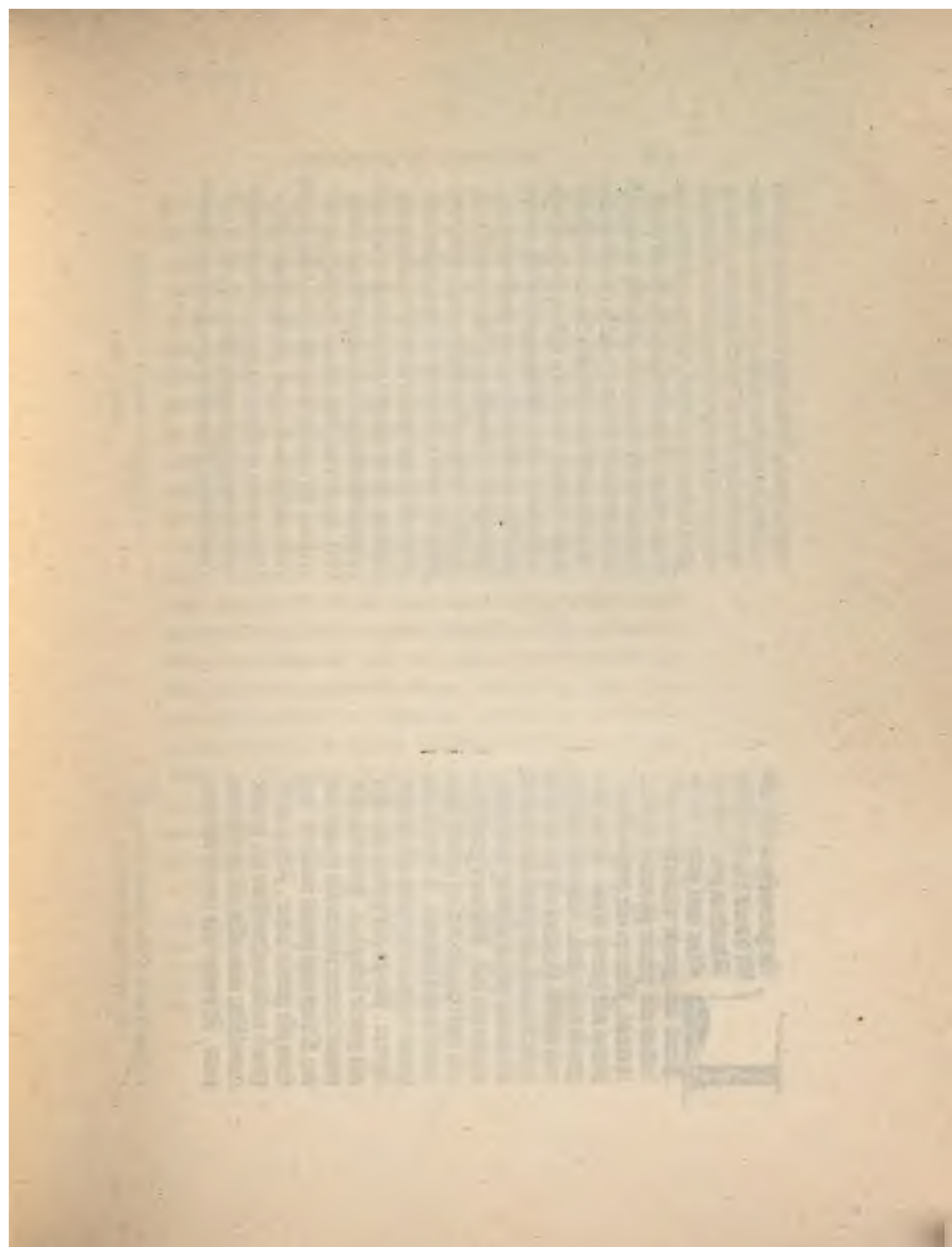
* Two copies of the work are catalogued by Hain (*9489, *9490). The second is not what we should call a new edition, but rather a "reprint" of the first; it bears the date "Millesimo (*sic*) cccc. lxxii. xxix. die mensis Octobris." The quotation given above commences *quos genuit ambos* and ends *Librorum*, etc.

chief or *principal*, and so refers, not to the priority, but to the superior excellence of their work (Hessels, page 190). This correction as to the true implication of the term is an important one, since it has been supposed by more than one bibliophile to refer to the *invention* of the art. Thus in Humphreys' "History of the Art of Printing," page 90, the passage in which the term occurs is thus translated: "He who is pleased to create high talents has given us two great masters of the art of engraving, both bearing the name of John, both being natives of the city of Mayence, and both having become illustrious as the first printers of books." And again, in one of Mr. Bernard Quaritch's Catalogues (almost a literature in themselves) appears, as a Preface to an extraordinary list of early printed books, a somewhat differently worded translation, but in which the "two Johns" are described as the "Illustrious First-producers of books that were stamped with letters."

So far as we know, and for this statement we have the authority of Mr. Hessels, the first direct mention of the name of Gutenberg in a printed book occurs in a work described as "Cronica Summorum Pontificum," edited "per fratrem Martinum ordinis predicatorum," and published on July 14, 1474, at Rome by Johann Philippus de Lignamine (Hain, *10857). In this work, under the date 1459, is a statement to the effect that in that year two presses were at work in Mentz, in the hands of Gutenberg

and Fust; but nothing whatever is said as to whom should be assigned the *invention* of printing. There is earlier documentary evidence as to Gutenberg as a printer, but it may not seem entirely satisfactory; perhaps the most conclusive occurs in "A Letter of Obligation of Dr. Homery," dated the Friday after the Festival of St. Matthew, February 24, 1468 (I take the description from Mr. Hessels, page 119), in which Dr. Homery acknowledges to have received from Adolf, the Archbishop of Mentz, "several forms, letters, instruments, implements, and other things belonging to the work of printing which Johann Gutenberg had left after his death, and which had and still belonged to him (Dr. Homery)," and then relates the stipulations as to their use and retention. Mr. Hessels, after careful investigation, all the more necessary since the document was not published until many years afterwards, says that he has found no reason for suspecting its authenticity; he considers that it affords confirmatory evidence as to Gutenberg having been a printer, but does not support his claim as the inventor.

As I have already said, Mr. Hessels devotes some forty pages of his interesting volume to a descriptive list of the types and works attributed by Dr. Van der Linde to the press of Gutenberg. He enumerates eight distinctive types, and concludes that works printed with the types which he numbers 7 and 8 have no connection with Gutenberg, the only work



Iste generatiois ihesu xpi
 filij david: filij abrahame.
 Abraham genuit isaac.
 Isaac aut genuit iacob.
 Iacob aut genuit iuda et fratres ei:
 iudas aut genuit phares et zara de
 thamar. Phares aut genuit elion:
 elion aut genuit aram. Aram aut
 genuit aminadab: aminadab aut ge-
 nuit nafti. Nafti aut genuit salo-
 mon: salomō aut genuit booz de raab.
 Booz aut genuit obeh et ruth: ruth
 aut genuit dāuid. Dāuid aut genuit salo-
 mon rex: david aut rex genuit salo-
 mon rex: et ea q̄ sunt ante. Salomō aut
 genuit roboam: roboam aut genuit
 abiam. Abias aut genuit asa: asa
 aut genuit iofaphat. Iofaphat aut
 genuit ioram: ioram aut genuit ozi-
 am. Ozias aut genuit ioatham: ioa-
 tham aut genuit achaz. Achaz aut
 genuit ezechiam: ezechias aut genuit
 manaffes: manaffes aut genuit am-
 mon. Ammon aut genuit iofram.

1. Page from a XVth-Century Manuscript,
 the WURTEMBERG MISSAL.

re in deopur. **N**umero ergo similitudinum multa leguntur
 in deopur quia prope civitate erat locus ubi cum
 filius est iherosolymis hiebat: gree & la-
 tine. **D**icitur ergo pilato pontificis iudeorum.
Qui scribat re in deopur: sed quia ipse dixit. **N**ec
 sum in deopur. **R**espondit pilatus. **Q**uod scripsi
 scripsi. **Q**ui istis ergo cum crucifixerant ei accepit
 vestimenta eius & fecit quatuor partes: una
 q̄ unius parte & tertia. **E**rat aut tertia mo-
 dialis desuper concessa p totum. **D**ixit ergo
 ad unum. **N**on scidamus ei sed scribamur
 de illa cuius sit ut scripura impleat dicens.
Partem suam vestimenta mea sibi & in veste mea
 non erit scissura. **E**t multos qui de hoc fecerunt.
Erat aut iuxta crucem iesu mater eius et so-
 ror matris eius maria cleopha & maria ma-
 dalene. **Q**uia vidit et ego iesus matrem & de-
 cipulum stantem quem diligebat: dixit matri
 sue. **Q**ui licet er filius tuus. **D**einde dixit dis-
 cipulo. **E**cce mater tua. **E**t ex illa hora accepit
 eam discipulus in sua. **P**ostea scribit iesus
 quia omnia consummata sunt: ut consummati
 scriptura dixit. **D**ixit. **E**cce. **E**cce aut posuit erat
 a cro pleni. **S**u autem spongiam plenam aceto

2. Type-printed Page of the MAZARINE, or
 42-lined Bible.

printed in these types being a "Prognostication," or Calendar, said to be of 1460, its real date being 1482. Books in types 3 and 4 must, he decides, be assigned to Peter Schoeffer; among these is a Latin edition of the Vulgate, printed in two columns, with spaces left for the headings to be filled in by the rubricator, each column containing forty-two lines. Of this finely printed work Humphreys, believing it to have been issued from the press of Gutenberg, has given two facsimiles taken from the vellum copy in the Grenville Collection, now in the British Museum.*

Of a Donatus of 1451, type 6, assigned to Gutenberg by earlier writers, but of which a few fragments only remain, Mr. Hessels can say nothing, while works in types 1, 2, and 5, fourteen in all, are the only ones which he believes can be claimed for Gutenberg. The most important of these, printed in type 5, is the "Catholicon" of Johannes de Balbus, of which a fine example is in the University Library (Hain, *2254). The date is 1460, and in the colophon we read, *Alma in urbe Maguntina nacionis inclite germanica*; this work has a special interest in that it is the only book of those assigned to Gutenberg in

* This edition is perhaps more generally known as the "Mazarine Bible," so called from the fact that the first example which attracted attention was found in the collection of Cardinal Mazarin. The illustrations Nos. 1, 2, Plate IX., show the similarity between this type and the admirable manuscript lettering of the Wurtzburg Missal, from which Schoeffer's type 3 was probably copied.

which the locality of the press is stated, while, at least in the first issue, no printer's name appears. A possible explanation is suggested by Humphreys, who inquires: "Was it that the importance of the new art was not yet felt, as it was when Fust and Schoeffer appended their names with so much self-laudation? or was it that Gutenberg, as a gentleman, did not wish his name to figure as that of an artisan? If the last, his misplaced patrician pride has been near losing for him a fame that might be envied by princes."

Schoeffer, after the death of Fust, continued his business as a printer, it is said in partnership with Conrad, his father-in-law. His first-issued book bearing a date, 1467, was an edition of St. Thomas Aquinas (Hain, *1459). There is a copy of this work in the University Library.

It is singular, and perhaps somewhat unfortunate, that in regard to the all-important question of the "Invention of Printing" the arguments on every side must, to so large an extent, be founded upon *inference*. The Town Library at Strasburg, within whose walls were preserved the original records of the lawsuits in which Gutenberg had been involved, was burnt to the ground in 1870, and these, as also other unique and priceless documents, for ever disappeared. It is true that transcripts of these early records have been

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Adorem⁹ dñm qui fecit nos, P⁹ venite au⁹ Seruite.
Beatus vir qui
 non abiit in consilio impiorū et in
 via peccatorū nō stetit: et in
 cathedra pēnitēcie nō se-
 dit, Sed i lege dñi do-
 luitas ei⁹: et in lege eius meditabit⁹ die ac
 nocte, Et erit tanq̃ lignū qđ plātati iſr-
 ſeais decursus aq̃e: qđ fructū suū dabit in
 tēp suo Et foliū ei⁹ nō defluet: et oīa q̃cuq̃
 faciet prosperabūt, Nō sic impij nō sic sed
 tanq̃ puluis que p̃ciat ventus a facie tērrē,
 Tideo non resurget impij in iudicio: nos

made from time to time, but the student of Hessels' "Gutenberg" will find sufficient reason for questioning the absolute accuracy of more than one of such transcripts. Documents, extracts, and copies of early papers at Mentz and elsewhere have been referred to; curious discoveries—as, for instance, with regard to a later use of Gutenberg's types—have been made, or have at least been described, by more recent as well as by earlier writers; but proof, such as we rightly demand before we formulate our decision, is still wanting; and in all our investigations respecting the actual origin of printing, and in our endeavour to estimate the value of evidence produced in favour of those to whom, on one side or the other, the invention has been positively assigned, we are confronted with the regrettable fact that there does not exist a single book, or pamphlet, or even page of type-impressed text which bears the name of either Gutenberg or Laurens Coster as its printer.

In my next and concluding lecture I propose to speak of the introduction of type-printing into Italy.

Note.—Of the more important works that may be assigned to the press of Gutenberg there are in the University Library not only the "Catholicon," but also the "Dialogus Rationis" of Mattheus de Cracovia (Hain, *5803), and an edition of a work by Thomas de Aquino, *circa* 1460 (Hain, 1425). A copy of the latter appeared in Mr. Bernard Quaritch's Catalogue, Part XV., 1888, and is described as "one of the ten recorded copies—this and another being the only two which are not yet locked up in the great Libraries."

LECTURE IV.

DELIVERED MARCH 8, 1897.

IN my earlier lectures I have endeavoured to define the steps which led to the invention and practice of type-printing in Northern towns. In my address to-day I propose to speak of the introduction of the art into Italy. This branch of our subject has a special interest, because the first presses in Italy owed their formation, if not their establishment, mostly to German emigrants.

The introduction of type-printing in Northern towns was, as I have said, preceded by the production of the Helglein and the blockbooks. It is a somewhat singular fact that while, in the earlier years of the fifteenth century, these illustrated guides to devotion should have become popular in the Low Countries and in Germany, no single example of such work seems to have been designed during that period in Italy, at least no example has been preserved, nor is there any record of their production. The explanation no doubt would be that the system of decoration was much more elaborated in the churches and in the religious houses in Italy.

Adorned with frescoes and mosaics of earlier days, many of which are fortunately preserved, and with painted Scriptural or legendary scenes and figures of a more recent date, there was no place for the ruder designs which originated elsewhere; nor, from the religious educational point of view, was there any need for their invention. Lessons in sacred history, actual or allegorical, would be better conveyed by the designs depicted within the Italian churches, and which, even in the present day, arouse our interest, and as works of art command our admiration, than they would have been by such archaic compositions as were produced in Northern schools; and it was no doubt the comparative rarity of decorative designs in the churches and monastic homes in the Low Countries which induced those whose duty it was to impart higher religious knowledge to the common people to create the saint-pictures and blockbooks which became so popular and were so widely distributed.

The art of engraving on metal for the purpose of taking impressions was unknown in Italy until the second half of the fifteenth century. The discovery has been assigned by Vasari to Maso Finiguerra, a Florentine goldsmith and engraver; but even his tentative experiment of printing an impression from an incised plate, to test the quality of his work or preserve a memorial of it, is not ascribed to any earlier date than 1452, and it was fully ten or twelve

years later before Baccio Baldini carried out in practical form the idea of engraving copper-plates for the direct purpose of producing impressions. The practice of wood-engraving we must assign to an even later date, since the earliest examples of xylographic work, so far as we know, were the illustrations executed for a printed book, the "*Meditationes*" of Cardinal Torquemada, which appeared in Rome in 1467, and to which we shall presently refer.

I am aware that this opinion is not entirely in accordance with the conclusions of earlier critics. The question has been raised whether a Decree of the Venetian Senate, dated October 1441, and issued to protect the interest of her citizens against foreign competition—the home trade having suffered from the importation of "great quantities of playing cards, and of coloured and printed pictures"—may not be regarded as a proof that "printed pictures" had been produced in Italy by Italian engravers, some years at least before such protective prohibition was demanded. The decision depends, of course, on the exact meaning of the terms used in the wording of the Decree, and these we now understand referred not to the importation of impressions upon vellum or paper from engraved blocks or metal plates, but to "imprints from blocks upon satin, linen, or other such fabric, to be used in the decoration of ecclesiastical vestments."*

* Willshire, "*Introduction to Ancient Prints*," Vol. I., pp. 43-5; Lippmann, "*Italian Wood-Engraving*," page 158.

Thus the intention was to put a check to the importation of ornamented vestments, not to prevent the introduction of Helglein or blockbooks for which there was no demand. As I have already suggested, the beautiful frescoes and other artistic and brilliantly coloured decorations which, under the influence of an advancing school, adorned the churches of Italy, familiarized the minds of the people with a higher conception of religious composition than could be gained from the ruder saint-pictures and Scriptural designs which were utilized in Northern churches; and although single engraved prints of a religious character may have been produced in Italy, yet even the earliest, to whatever date they may be assigned, had no connection whatever with the introduction of type-printing.

The first printed book which issued from an Italian press did not make its appearance until 1465, *i.e.* until twenty or more years after the "invention" and practice of the art in Northern countries. It must not be supposed that, until that year, type-printed books were absolutely unknown in Italy; on the contrary, we may feel assured that the frequent communication that took place between the Head of the Roman Church and the occupants of various Episcopal Sees, especially in Germany and Austria, could hardly have existed without some information, as also some examples, of the newly discovered process having been transmitted. The idea that

early printed works from German and perhaps other Northern towns found their way into the hands of Italian bibliophiles shortly after their publication is not merely a supposition. It is asserted by Humphreys, though he does not give his authority for the statement, that a copy of the "*Duranti Rationale Divinorum Officiorum*," printed at Mentz "*per Iohannem fust ciuem Maguntinus et petrum Gernssheym*" in 1459, was "sold in Venice in 1460 for eighteen ducats, which amounts to the approximate value of £10 in English money."* I have myself seen a copy of this 1459 edition among the incunabula in the Vatican, and as that library was founded by Pope Nicolas V. in 1447, it is reasonable to suppose that a religious work, published a few years later, relating to the Services of the Church, compiled by a Bishop under Papal sanction, "*guilhelmus minatensis ecclesie episcopus*," and which before the year 1500 passed through some forty or more reprints or editions, would have been added, very soon after its appearance, to the large and priceless selection of manuscripts which formed the collection. This 1459 "Rationale" is No. 1 in the admirable manuscript Catalogue of the Fifteenth-Century Books preserved in the Vatican. In the same library, No. 2, is a beautiful copy on vellum of the "*Biblia Latina*," the first Bible with a printed date, *Anno incarnacōis dñice. M.CCCC.LXIJ* (Hain,

* Humphreys, "Invention of Printing," page 87.

3050), known as "the 48-line Bible," by the same printers. Of this Bible I have seen two other examples in Italy, both of them printed upon vellum, one in the Barberini Library at Rome, the other in the Naples Museum. I especially refer to these because they have, both of them, illuminated initials and borders of Italian fifteenth-century character, and we may therefore reasonably infer that these copies had been carried into Italy at about the time of publication, and the illuminations added very shortly after their arrival.

Of one thing we may be certain, that when the art of printing was commenced in Italy it would not be regarded as a new discovery. It proved only that the opportunity had arisen to introduce a process, with the results of which the more educated classes had become to a certain extent familiar, and of which they recognized the advantages. All they required was to know how and by what means such work could be effected, and from whence they should obtain the assistance of practised hands to undertake and to complete it.

But, before we speak of the actual introduction of

* The Catalogue of early printed books in the Vatican Library is contained in three large folio volumes, written in Latin, in a very careful and legible hand, paged and with wide margins. The inscription on the title-page reads : *Catalogus Codicum Seculo XV Impressorum Qui in Bibliotheca Vaticana Romæ adservantur. Aloysius Zappelli Presbyter Romanus Basilica S. Marci Canonicus Eiusdem Bibliothecæ. Scriptor Latinus Substitutus capit. Anno MDCCCLIII. Absolvit anno MDCCCLXVIII.*

the art of type-printing into Italy, I would refer to a paper entitled "A Short Account of the Libraries of Italy," which appeared in the first volume of the "Transactions of the Philobiblon Society," in 1854, communicated by the Hon. Robert Curzon, afterwards Lord Zouche. The legend is to the effect that, in the earlier years of the fifteenth century,

a man named Panfilo Castaldi, a native of Feltre, was employed by the Government of the Republic of Venice to engross deeds and public edicts of various kinds, . . . the initial letters at the commencement of the writing being usually ornamented with red ink, or illuminated in gold and colours.

The tradition continues :—

According to Sansovino, certain stamps or types had been invented, some time previously, by Pietro di Natale, Bishop of Aquileia. These were made of Murano glass, and were used to print or stamp the outlines of these large initial letters. Panfilo Castaldi improved on these glass types by having others made of wood or metal; and having seen several Chinese books, which the famous traveller Marco Polo had brought from China, and of which the entire text was printed with wooden blocks, he caused moveable wooden types to be made, each type containing a single letter, and with these he printed several broadsides and single leaves at Venice, in the year 1426. Some of these single sheets are said to be still preserved among the archives of Feltre.

And further, we are told how Johannes Fust, whom we know as a printer at Mentz, "became

acquainted with Castaldi, and passed some time with him in his Scriptorium."* And, in short, it was from Panfilo Castaldi that Fust acquired the knowledge of printing, and introduced the new invention into Germany.

I need hardly say that we, in these days, regard the whole statement as purely imaginative; but it was not so considered, some forty years ago, by the citizens of Feltre, who raised a statue to the memory of their distinguished townsman with the inscription—*To Panfilo Castaldi, the illustrious inventor of moveable printing types, Italy raises this tribute of Honour too long deferred.*

But we will now turn to history.

Early in the year 1462 events took place in Mentz which resulted in the introduction of type-printing into Italy. A little over two years before that date, towards the close of 1459, occurred the death of the Archbishop, Theodoric von Erpach. The appointment of his successor rested with the Episcopal Chapter, subject to the approval of the Pope. The decision of the majority of the Chapter was in favour of Thierry von Isenberg; the minority, acting rather under political than religious influence, chose Adolf of Nassau. An appeal was made to Rome, and the Pontiff, Pope Pius II., after some delay, entirely dissenting from the expressed resolution of the

* See Introduction to Colonel Yule's second edition of the book of Marco Polo, pp. 133-135.

majority, issued his command that Adolf should be elected ; but with this the leading citizens, as well as the Episcopal Chapter, refused to conform, Thierry von Isenberg assumed office, a general insurrection, a sort of civil war was the result, in which Adolf obtained the upper hand : mob law prevailed, many of the more respectable inhabitants were slaughtered or driven from their homes, and their houses given up to plunder ; for fully three years the city remained in this deplorable condition, and it was inevitable that, during this troubled time, the work of the Mentz printers would be suspended.

As I have already remarked, the name of Gutenberg does not appear in any of the printed books which have been assigned to his press ; the latest dated works which are attributed to him are the "Balbus Catholicon" of 1460 (Hain, *2254), and an "Indulgence" of 1461, of which fragments only remain. The publication of these of course preceded the insurrection in Mentz. A later work has been assigned to Gutenberg, a "Declaration" or "Manifest" of Diether (Thierry) the Elector, of April 4, 1462 : it bears the date *Anno domini Millesimo quadringentesimo sexagesimo secundo* (Hain, *6161) ; but, as we learn from Hessels,* not only is the "Manifest" in its printed form declared to have proceeded from the press of a Mentz printer, Franz Behm, some time after 1552, but there is reason to believe that the

* "Gutenberg," by J. H. Hessels, 1882, page 18.

very manuscript from which the printed work is taken must have been written nearly a whole century later than the event it records.

There is another and very much more important work bearing the date 1462, and that is the 48-line edition of the Latin Bible printed at Mentz by Fust and Schoeffer (Hain, *3050); but as the day and the month of its publication are not given, this may have been, and probably was, issued in the beginning of the year. A letter of Indulgence, without name of printer or date, catalogued in Hain (Hain, 10123), and attributed by him to one of the Mentz printers, is assigned to *about* the year 1463—*Mogunt. circa* 1463; it may have been printed earlier or later, and therefore affords no evidence.

In 1465 appeared a volume printed by Fust and Schoeffer, "Bonifacius VIII. Liber VI. Decretalium" (Hain, *3583); it is dated *Anno dñi. M.CCCC.LXV. Die vero XVII. mensis decemb.*; and, in the same year and from the same press, an edition of "Cicero Officia et Paradoxa," etc. This has not the day of the year, and therefore may also have been issued at or about the same time. Thus we may reasonably assume that for more than three full years, that is, from early in 1462 until the latter months of 1465, all book-printing in the city of Mentz was suspended.

The evil days which had fallen upon the city had caused the dispersal not only of the master printers, but also of the practised and steady workmen whom

they had employed. Some would seek a livelihood in other Northern towns—perhaps, if their means permitted, to commence work on their own account ; some, again, migrated southwards, and either established their own presses, or entered the services of intelligent patrons who desired to introduce the practice of type-printing into Italy. Of course this could not be effected at once : material must be provided, types manufactured, delay for one or other cause would be inevitable ; besides, the business they would commence would necessarily be a more or less costly one, and before they embarked in it they would have to estimate the possibility of success. The result would not be in every instance satisfactory ; but, to ourselves, very interesting indeed is the frequent occurrence of the names of printers of German nationality, or from Northern towns, in so large a proportion of the earlier Italian books. Thus *Sweynheim and Pannartz* in 1465 commence their work at Subiaco ; in 1467 *Ulrich Hahn*, usually inscribing himself Uldaricus Gallus, prints a book in Rome ; two years later *Johannes of Spire*, a city on the Rhine, and *Valdarfer of Ratisbon*, are in Venice ; *Numeister*, believed to have learned the art under Gutenberg, established his press in 1470 at Foligno ; *Johanne Renardi Almanum* in the same year is printing at Treves ; in 1471 *Andreas Belfortis Gallus* is at Ferrara, *Sixtus Riessinger* appears at Naples, and *Gerard de Lisa of Flanders* at Treviso ; in 1472

Mathias of Antwerp is printing at Monreale ; in 1473 *Heinrich Alding*, a German who had worked under Sweynheim and Pannartz, asserted to have been identical with *Mastro rigo dalamanìa*, was established at Messina. Later on, German names of printers in Southern towns occasionally occur, but much less frequently, since the art, once established, was mostly carried on by Italian printers.

The first printing press established in Italy was within the precincts of a monastery dedicated to Santa Scholastica, the pious sister of St. Benedict, situated a few minutes' walk from the town of Subiaco, some thirty miles to the east of Rome. I much regret that I am unable to give a personal description of a place which is to us one of the most interesting, and, as we learn from Murray,* one of the most charmingly situated, of the lesser towns in Italy. You are no doubt familiar with the works of Mrs. Jameson. In her "Monastic Orders," page 7, she gives a short history of St. Benedict, or, as he is known in Italy, San Benedetto. Born in the year 480, educated in Rome, influenced by the teaching of St. Jerome and St. Augustine, he very early devoted himself to a religious life. Before he reached his twentieth year he had retreated to what was then a wild and hardly known district in the hill country, and taking refuge in a cavern (*il Sagro Speco*), for

* Murray's Handbook "Rome and its Environs," 1894 edition, page 386.

three years subsisted on such scanty food as could be supplied by a brother-hermit. Of the after events of his life, how at Monte Cassino he founded the celebrated monastery which bears his name, and which is now one of the most important educational establishments in Italy, we may not now speak, nor can I refer to its splendid library, rich in early manuscripts and printed books, nor to the courteous reception I myself have met with there: we must return to Subiaco.

At the time to which I have referred, that is, from 1462 to 1465, the Principal or Abbot of the Subiaco Monastery was the Cardinal Torquemada (Latinized "Turrecremata"), an ecclesiastic of singular intelligence, and regarded in high esteem at the Vatican. Of his personal history we have but little information: we know that he was present at the Council of Constance in 1414, being then in his twenty-sixth year, and that later on, in 1431, he attended the Council of Basle as the direct representative of Pope Eugenius IV. In his time the Monastery of Subiaco appears to have been, to a considerable extent, the resort of German pilgrims, and it would probably have been by his special invitation that Sweynheim and Pannartz, when they could no longer remain in Mentz, were induced to take up their residence within its walls, and under the patronage of the Cardinal, and no doubt at his expense, establish there the first printing press which appeared in Italy. Of course

this must have been a work of time, since we can hardly suppose that they brought with them all the requisite materials. Some portion, at least, of the paper they would use might, as we have said in referring to the character of the watermarks,* have been brought from Holland; while as to their type—I have taken some pains to investigate the matter, and my conclusion is that the type they used was not imported, but was manufactured by themselves and their assistants in the monastery, and as nearly as possible in imitation of the Italian lettering described as “Roman character,” such as was generally used for the production of manuscript copies of classical authors most in repute among Italian students. The fact that these types had to be manufactured after the arrival of Sweynheim and Pannartz at Subiaco explains how it was that the first books printed there did not make their appearance until two, or perhaps three, years later, *i.e.* until the year 1465.

The first of the four books issued from the Subiaco press was a school book, known as a “Donatus pro Puerilis.” The “Donatus” was a name given to a Latin Grammar, such as was compiled for the use of the novices in a convent—the only educational establishments in those early days—and was so called from one Donatus, a grammarian of, it is said, the fourth century, who was the first to introduce such

* *Ante*, page 57.

educational work. Of this book we know little more than the name; we cannot learn that any single example of it has been preserved, nor have we any record of its production of more recent date than 1472, *i.e.* seven years after its publication. In that year, as a Preface to Vol. V. of a Biblical Commentary by Nicolas de Lyra, printed by Sweynheim and Pannartz in Rome, *in domo Petri de Maximis* (Hain, *10363), there appeared a letter written by Johann Andrea, Bishop of Aleria, who edited the work, an appeal, on behalf of the printers, addressed to Pope Sixtus IV., from which it would appear that the work carried on by Sweynheim and Pannartz at Subiaco, and afterwards at Rome, had not been altogether a success. In this letter the Bishop gives a list of the books which had proceeded from their press, and at the head of this list he places the "Donatus," of which, he says, 300 copies were issued, adding *Unde imprimendi initium sumpsimus*. We may therefore, on such evidence, regard the "Donatus" as the first book printed in Italy.

The second book entered in the list is "Lactantius de Divinis Institutionibus" (Hain, *9806), of which the Bishop of Aleria says 825 copies were produced, "volumina octinginta vigintiquinque D.CCC.XXV." Only a few examples of this work have been preserved; it is not, however, so rare as are examples of many of the earlier printed books. The names of the printers do not appear in the colophon, but the

* In these 825 copies the Bishop probably included those issued in the editions of 1468, 1470, and 75 which he does not refer to in his list.

date is given, *Sub anno domini M.CCCC.LXV.*, the day of the month, *die vero antepenultima mensis Octobris*, and also the place of printing, *In venerabilis monasteris Sublacensi*.

Although the "Lactantius" stands second upon the list, its position is not regarded by all writers as sufficient evidence, and they assign the second place to the "Cicero de Oratore" (Hain, *5098), which, in that list, follows the "Lactantius." The argument is put forward by Hawkins, who accepts this conclusion.*

He first refers to the list of the books sent to Pope Sixtus IV., and continues that after the "Donatus" there follows

an edition of one of the works of Lactantius, which for more than four hundred years has been considered the first book printed in Italy; and the third, an edition of "Cicero de Oratore, Libri III.," which turns out to be the first of their known productions instead of the second. Signor Carlo Fumagalli,† of Leghorn, has discovered a copy of this work of Cicero, which contains a well-authenticated inscription, dated *pridie Kal. Octobres*, 1465. The "Lactantius" was finished the 29th of that month.

To this description Mr. Hawkins adds a reproduction of seven lines of the printed text from the first page of the "Cicero," with three lines of manuscript

* "First Books and Printers of the Fifteenth Century," by Rush C. Hawkins, 1884, page 25.

† Fumagalli, "Dei Primi Libri a Stampa in Italia," 1875.

above ; below is inserted a device, and at the foot of his page four inscribed lines which I presume to be reproduced from the " well-authenticated inscription " discovered by Signor Carlo Fumagalli ; it commences *Correctus & emendatus fideliter hic Codex*, etc., and ends *pridie Kal octobris* M.CCCC.LXV. Without further proof as to the origin and authenticity of this inscription, I do not think we can accept the suggested alteration. The handwriting, if correctly represented in Hawkins' reproduction, is certainly of an early character, and the date precedes by a month that which appears in the colophon of the " Lactantius " ; but this is hardly sufficient to justify the decision as to the priority of publication, and thus set aside as untenable the tradition of four hundred years.

But apart from the question of priority of production, this " Lactantius " has an additional interest in the fact that in it we have the first appearance of words or short sentences in the Greek text printed from moveable types. Our examination leads to the conclusion that the printers had no Greek type in hand when they began their work : in some copies we find that in the earlier pages spaces are left in the lines of text to allow of the after introduction of Greek lettering ; and even then the intended Greek words or sentences have not always been printed, but have been filled in by hand. And, speaking of this, it is a singular coincidence that in the same year,

Lactantij fecimam de diuisi institutionibz
aduersus gentes rubricat pmi libri impu-
isuentis sit et fuerit semp cognito uicinus Et qd ner sine elugi
sequencia ner sine sapientia sit probanda uolgio ad pmiu

ACTIO et excellens ingenio nri quom se doctrinæ pe-
nitius dedidissent: quicquid laboris poterat impendi:
contentis omnibus publicis et priuatis actionibus;
ad inquirendæ ueritatis studiū se conuulerūt: existimā-
tes multo esse præclarus humanarū diuinarūq; rerū
suaueligare ac scire rationē q̄ struēdis opibus aut cu-
mulariis honoribus inherere: Quibus rebus quoniam fragiles cernereq;
sunt: et ad solū corporis puluentē cultum nemo melior: nemo iustior effec-
tū potest. Erāt quideq; illi ueritatis cognitione dignissimi quam scire cernere
cupuerūt: atq; ita ut eam rebus omnibus anteponerēt: Nam et abieci-
ssēt quodā res familiares suas et renūciāssēt uniuersis uoluptatibus constac: ut
solā ueritatēq; mirant: nudi expeditiq; sequerent: cuncti apud eos ueritatis
nomen et auctoritas ualeat: ut in ea omne summi boni premium plicaret.
Sed neq; adepti sūt id quod uolebat: et opē simul atq; industriā pde-
rūt: quia ueritas idēst archanū sumi dei qui fecit omnia ingenio ac ppris
sensibus nō potest comprehēdi: alioquin nihil fūer deū hominēq; distaret si
cōsilia et dispoſitiones illius male tactis pternis cogitatio assequeret huma-
na. Quod quia fieri nō potuit ut hominē p se ipsū ideo diuina noscere: non
est passus hominem deus tamē sapientię requirentem diuinitas errare: ac sine
ullo laboris effectu uagari per tenebras inextricabiles: aperuit oculos eius
aliquando: et notionem ueritatis munus suū fecit: ut et humanā sapientiā
nullā esse monstraret: et errat ac uago niam colloquendę immortalitatis
obscideret. Verū quoniam pauci uident hoc celesti beneficio ac munere: quod
obuoluta inobscuro ueritas latet: eaq; uel contenti doctis est: quia ideo

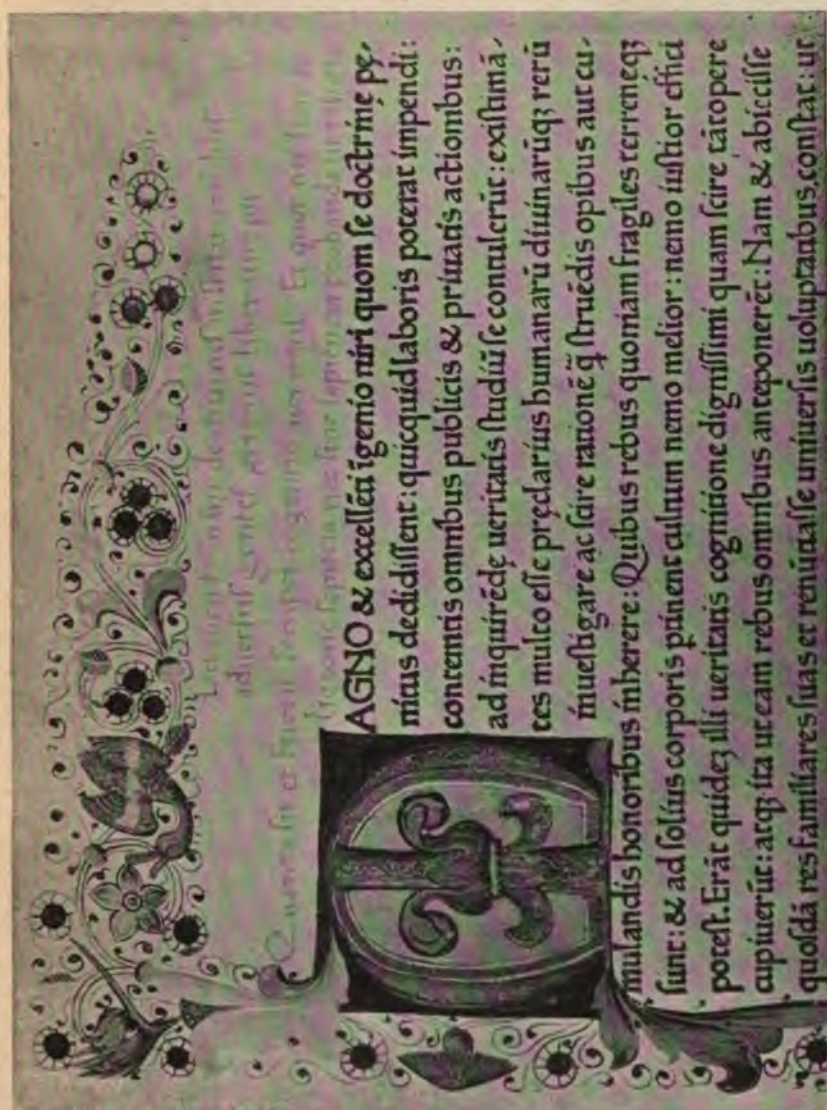


Part of Page of LACTANTIUS, with Interlaced Border.

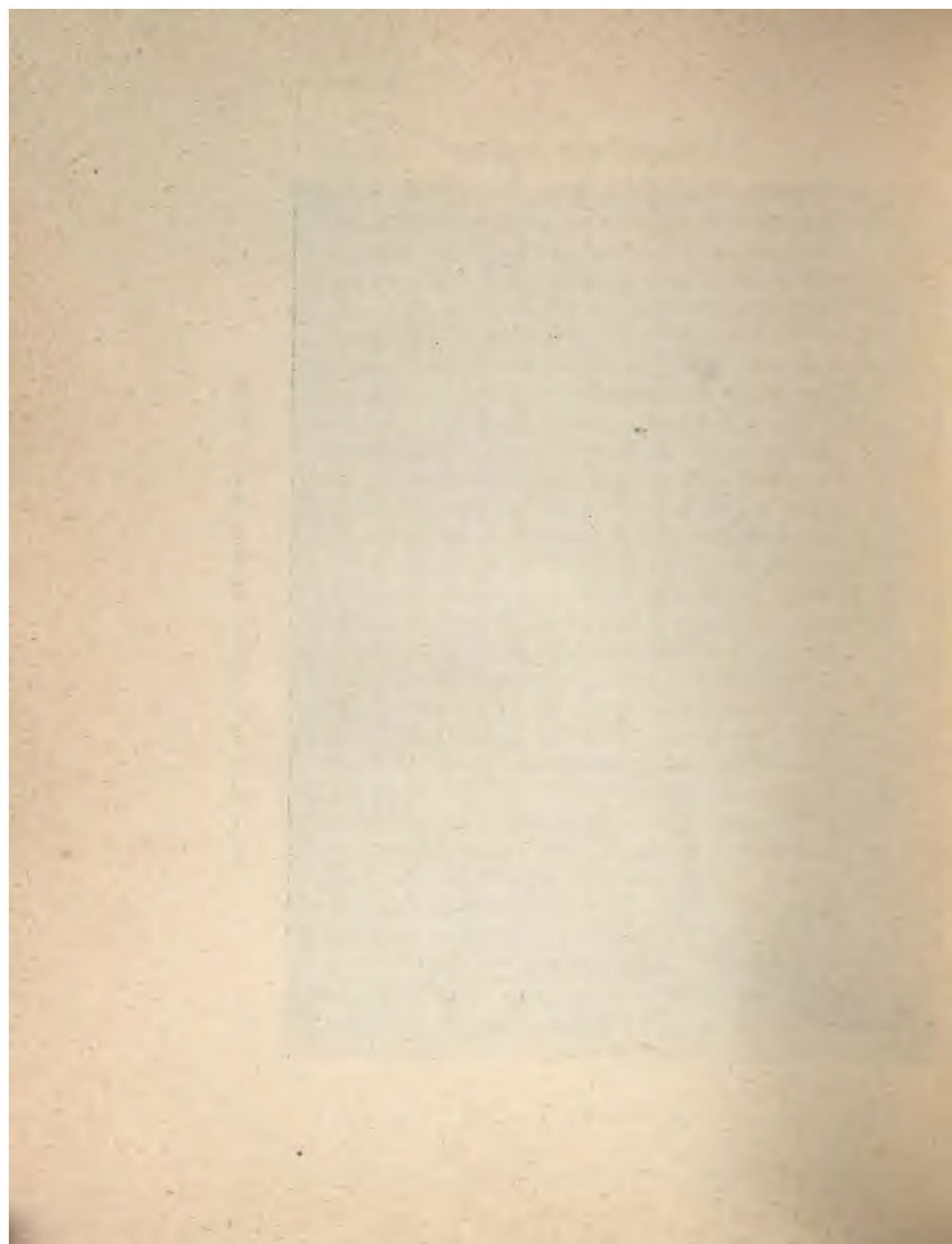
1465, a book to which I have already referred, "Cicero Officia et Paradoxa" (Hain, 5238), was issued at Mentz, from the press of Fust and Schoeffer, in which also Greek characters are occasionally used. But in this Mentz book the Greek lettering was not produced from moveable type, but from engraved woodblocks. We must not, however, on this account regard the "Cicero" as in any sense an inferior work; Humphreys, from whose "History of Printing" I have obtained the information, and who was himself a practical printer, says that in this Mentz "Cicero" we find the earliest instance of an important advance in the mechanical development of the art, *i.e.* the separation of the parallel lines of type by what is known as *leading*, which means the introduction of a thin strip of lead to establish a clearly defined and equal space between the type-set lines.

Still another question of interest connected with the "Lactantius." Each chapter in the work commences with a large illuminated capital, and the first page is decorated by an ornamental border (Plates XI. and XII.). In what manner and by what process were these designs produced? Were they entirely handwork, or were the designs first imprinted from engraved blocks and then completed and coloured by the illuminator? Dr. Lippmann, the learned Director of the Royal Print Room at Berlin, in his "Art of Wood-Engraving in Italy," no doubt forming

his conclusion from some special examples of the "Lactantius" which had passed into his hands, writes that "Sweynheim and Pannartz made use of wood-engraving for the purpose of decorating the first page with an ornamental border. It is a simple linear design, showing white interlacements on a black ground, and was evidently borrowed from a mediæval manuscript." Some time ago I made careful examination of five examples of the "Lactantius" which I met with in libraries in Italy, not only measuring the width and depth of the outlines, and the relative position of the several designs in the illuminated borders, but also noting the form and dimensions of the several initial letters, and I found that in no two examples did either the bordering or the initial letters absolutely correspond. Since that time I have examined other copies of the "Lactantius," eleven in all, and with the same result. And further, there is a fine copy of the book in Rome, in the Barberini Library, slightly worm-eaten, but otherwise in a good state of preservation. I observed that, while the impression made by the type could be distinctly seen on the verso of the printed page, and the depression in the paper caused by the type on the recto of the leaf was also distinguishable, the outlines of the ornamental border, as also of the initial letters, do not appear in relief on the verso of the page. It is of course possible that, if these outlines had been impressed from an



Part of Page of LACTANTIUS, with Illuminated Capital and Border.



engraved block, the damping of the paper, caused by the after colouring of the design, might have lessened the prominence of the ridges upon the verso, but I do not think they would have been entirely obliterated.

My object in making such 'critical examination was this. If it could be proved that the ornamental borders or the initials were originally printed from engraved blocks, they would rightly be regarded as the earliest instances of impressions from engraved woodblocks occurring in Italian books ; and my contention that the first woodcut impressions appeared in a work published in Rome two years later, in the "Meditationes" of Cardinal Torquemada, could no longer be maintained. I do not assert that there are no copies of the "Lactantius" in which the borders, as also the initials, have been printed from engraved blocks, but the explanation I believe to be this : that when the copies of the newly printed work were issued from the press, the first page of each was without the ornamental border ; and also that these first pages, as well as the later pages, were printed without the large initial letters which mark the commencement of the succeeding chapters ; that the ornamentation and the initial letters were added afterwards, perhaps, in some examples, by practised illuminators employed in the Scriptorium, to whom such work would be entrusted ; in others by skilful workmen employed by those into whose hands

examples of the work had passed; or it might be that, not single copies, but some considerable number would be taken over by a dealer, and under his direction completed for the market, incised stamps being manufactured to outline the proposed decorations; and this might have taken place some years afterwards, when the printed work had become better known, and copies were inquired for by book-collectors to place in their libraries.

The fourth and final work printed at Subiaco was an edition of "Augustinus de Civitate" (Hain, *2046), dated the 12th of June, 1467. This has no name of printer or place of printing, but appears in the list of works in the Preface to the Biblical Commentary of Nicolas de Lyra, as having been printed by Sweynheim and Pannartz.

The next work which was issued by these printers, and the first book in which their names appear, was an edition of the "Epistolæ Familiares" of Cicero (Hain, 5162). It is a large quarto of 246 leaves, with 31 lines in the page. The recto, fol. 1, in the Vatican example has hand-coloured initial, E, and an illuminated border; in the lower compartment appears a portrait head, turning to the left, and assumed to represent the author. The colophon consists of four lines ending *In domi Petri de Maximo* M.CCCC.LXVII., and the work has the distinction of having been the first book printed in Rome.

Some writers have contended that this was not the first, but venture to assign the precedence to the "Meditationes" of Cardinal Torquemada (Hain, 15722). In this work, printed *per Ulricum Han*, the date is given 1467, *die ultima Mensis decembris*. Surely, one would think, a book which bears date the last day of December could hardly have preceded another book printed in the same year; but we must not overlook the fact that the chronology of those days was not at all in accordance with the revised arrangements which now prevail.* To confine ourselves to Italy, the legal year in Venice began March 1; consequently a book dated in January or February of any year, say, for instance, the edition of Lascaris, "Grammatica Græca" (Hain, *9924), of which you have an example in the library of Corpus Christi, printed by Aldus Manutius in 1494, *Ultimo Februarii*, was actually produced in what we should now describe, not as the year 1494, but as the year 1495. The second part of this work appeared, as declared in the colophon, *octavo Martii*, 1495—that is, eight days, not a year and eight days, later. A *reprint* of the whole work appeared in the following year, and for this the date is given M.CCCC.LXXXXV. *ultimo Februarii*; this, according to modern chronological arrangement, would be February 1496. Such dates will be somewhat confusing to those who

* Consult *Bibliographica*, Part II., page 193: "The Chronology of the Early Aldines," R. C. Christie.

overlook the alteration that has since been made in our chronology. In Florence, again, until the year 1750, New Year's Day was kept on March 25; in Rome, as also in Milan, the new year commenced with Christmas Day, but I cannot say whether "all sorts and conditions of men" in the Eternal City strictly followed this regulation. If it was recognized as imperative by the Cardinal, who had entrusted the printing of his "*Meditationes*" to Ulricus Hahn, the *dies ultima mensis Decembris* in the colophon was within the first week of the new year—that is, of the year 1467—and the book must therefore by many months have preceded the "*Cicero Epistolæ Familiares*" of Sweynheim and Pannartz, who would not have left Subiaco and taken up their residence in Rome until the following summer—that is, until after the final book they printed at Subiaco had been issued. For our own part, we do not think that the regulation as to the commencement of the new year on Christmas Day affected ordinary business transactions. We must acknowledge that, so far as our researches have extended, we have been unable to discover any direct evidence in support of or adverse to our conclusion; we would therefore take into account the circumstances attending the removal of Sweynheim and Pannartz from Subiaco to Rome.

We have no direct information as to the causes which led to the suspension of the press established at Subiaco, and to the migration of the two German

printers to Rome ; it is therefore only upon inference that we can found our opinion. We notice that, during the stay of these printers at Subiaco, they produced four several works, but their names as printers do not appear in any one of them, or at least in any one of the three of which copies have been preserved. The reason, no doubt, would be that, as they were then in the employment of Cardinal Torquemada, and were not printing on their own account, they would not be permitted to insert their names in the books which they produced ; it was not they, but the Cardinal (no doubt on behalf of the monastery), who would profit by the sale. They issued their final work from the press at Subiaco in the summer of 1467. Before the close of the same year they printed another book, in which, for the first time, their names appear, and they state in the colophon that their press was then established in Rome. We find, too, that in the construction of this work they had used a different type to that with which they had previously printed. It is evident, therefore, that they had not been permitted to take away their type, but would have to manufacture an entirely new fount. Surely we may infer that there had been some disagreement between their patron and themselves, and that they had not parted on very friendly terms.

Humphreys, in his "History of the Art of Printing," has suggested, as the cause of their disagreement, that

the Cardinal had already given to Ulrich Hahn the commission to print his "Meditationes," entrusting him also with the execution of the illustrations with which it should be accompanied—a work which, as afterwards appeared, Sweynheim could more satisfactorily have accomplished—and he adds that Sweynheim and Pannartz feared that "the rival press might soon be able to take the lead in Italy if they remained in the obscure village of Subiaco." My own conclusion is that the employment by the Cardinal of another printer was the result, not the cause, of the disagreement; and that we may reasonably assume that the "Meditationes" was not placed in the hands of Ulrich Hahn, a printer who at that time was utterly unknown in Rome, until after the craftsmen in Torquemada's employment had closed their press at Subiaco. And further, as regards the earlier date which some writers have assigned to the publication of the "Meditationes," if it had appeared in the first week of 1467, the commission must have been given to Ulrich Hahn some six months, or more, earlier—that is, about a year before Sweynheim and Pannartz removed to Rome, and several months at least before they were entrusted with the final work which they printed at Subiaco. It is hardly likely, if this were the case, that some information as to the action of their employer should not have reached them; if it had, we may naturally suppose they would have parted earlier. I myself

sed futuris p̄spiciens. ad laudem. omnipotentis dei qui
tamē tuam beatitudinē feliciter p̄regat & cōseruet. &
tādē post diutinum huius uirecursum: unacū grege
tibi credito perducatur ad uitam eternam. Amen.

¶ Edidit hoc lingue clarissima norma latine.

¶ Excelsi ingenii uir rodoricus opus.

¶ Qui Rome angelica est custos bene fidus in arce.

¶ Sub pauli ueneti nomine pontificis.

¶ Claret in italici zamorensis episcopus ausis.

¶ Eloqui. it superos gloria parta uiri.

¶ Hoc Conradus opus suu cynbeym ordine miro

¶ Arnoldusq; simul pannarts una e de colendi

¶ Gente theotonica: roma expediere sodales.

¶ In domo Petri de Maximo. M.CCCC.LXVIII.

From Page of SPECULUM VITÆ, Showing the Type used by Sweynheim and Pannartz
on their Removal to Rome.

think that the desire to establish a press of their own was sufficient reason for their departure. Although their names had not yet appeared in their printed works, it is evident from the patronage afforded them on their arrival in Rome that the advantages of the art which they had introduced into Italy were already recognized, and it was only natural that they should avail themselves of the opportunity of commencing business on their own account, and realizing its anticipated profits.

The new fount of type which Sweynheim and Pannartz manufactured was more Roman in character, and somewhat larger in form, than that they had used at Subiaco (Plate XIII.). What became of the type they had made there, and with which they had printed, is not known; but Mr. Gordon Duff, in his "Early Printed Books," remarks that "the smaller letters in the 'Lactantius' have a curious resemblance to those used by Zainer at Ulm and by Schussler at Augsburg in their earliest books, though the capital letters are quite different." Now the earliest works produced by these printers are respectively dated 1473 and 1470. The removal of this type to these Northern towns, perhaps by German inmates of the monastery, may therefore have been effected after Torquemada's death, which took place towards the close of 1467, before the appearance of the work which he had entrusted to Ulrich Hahn.

Sweynheim and Pannartz continued to print *in domo Petri de Maximis*, publishing about thirty-two different works, until August 1472, when they seem to have removed their press to some other locality; their final work—they had then printed about thirty-five—was a “Polybius Historiarum Librum,” dated the last day of December 1473 (Hain, *13246). After this they apparently dissolved partnership. A year later, on December 2, 1474, appeared a “Perottus Rudimenta Grammatices” (Hain, 12644), in which Pannartz's name alone is inserted: it would seem that he had then returned to their former home, since we read in the colophon, *in alma urbe Romi in domo nobilis viri Petri de Maximis*; and there he continued to print until 1476. I do not find any record of his death, which is assumed to have taken place in the same year. Of Sweynheim as a printer we have no further record; but we learn from a passage in the Preface to the “Ptolomæus Cosmographia,” printed by Buckinck, a German who had established a press in Rome, and dated October 10, 1478 (Hain, 13537), that Sweynheim had been for some time employed in engraving, upon metal plates, several of the twenty-seven maps which were introduced into that work, but that he had not lived to complete them.*

* Mr. Gordon Duff, in his “Early Printed Books,” page 64, gives a transcript of this Preface, which commences: *Magister vero Conradus Sweynheim, Germanus, a quo formandorum Romæ librorum ars primum profecta est*, etc.

PLATE XIV.



Copy of a Woodcut in the *MEDITATIONES*, the First Illustrated Book
Printed in Italy (Rome, 1467).

The "Meditationes Reverendissimi patris domini Iohannis de turre cremata" (Hain, 15722), as it is described on the recto of the first printed leaf, has a special interest for us. Although, as we contend, it was not the first book printed in Rome, it was the first book produced in Italy with printed illustrations. It has become exceedingly rare ; only three existing examples are known : one of these is in the library at Nuremburg, another is at Vienna, and the third, which Dibdin describes as "still in its original parchment cover," is among the treasures of the Spencer, now the Rylands Library. The book contains thirty-four illustrations, one upon each page. It is stated in the book itself that the designs were taken from a series of frescoes which, under the direction of Cardinal Torquemada, had been painted on the inner walls of some portion of the Church of Santa Maria sopra Minerva : *Sacrosancte Romane ecclesie Cardinalis posite et depicte de ipsius mandato in ecclesie ambitu sancte Marie de Minerva Rome*. Whether the frescoes entirely disappeared long ago, or whether their remains were effaced when, some forty years since, certain costly improvements were effected, and "the roof painted in the most florid style," we do not know, nor is this perhaps of any great importance, since the character and composition of the designs in the "Meditationes" are not, we think, in accordance with Italian artistic designs of that period ; and it is possible they may have been executed by Ulrich

Hahn himself, or by a German wood-engraver under his directions (Plate XIV.).

We describe them as "woodcuts," but some authorities, Passavant * and others, have expressed the opinion that they may have been executed on some soft metal; and with this conclusion Mr. W. J. Linton, in his "Masters of Wood-Engraving," entirely agrees. Mr. Linton is so much esteemed as an authority that I will repeat what he says:—

The "Meditationes," printed at Rome, in 1467, by a German, Ulrich Hahn of Ingoldstadt, has been generally considered the first book with woodcuts printed in Italy. But I have no hesitation in deciding that Passavant was right in believing them to be in metal, some soft metal, pewter or other, as will be plain to any engraver, from the graver indentations seen in the bridle of the ass [*i.e.* in the cut of the "Flight into Egypt"] and elsewhere. . . . The first book with woodcuts printed in Italy is probably the treatise by Valturius, "De re Militari," 1472.

We must, of course, presume that Mr. Linton had seen the original impressions. My own conclusion has long been that, even with the originals before us, it is often very difficult to decide whether such early impressions were taken from engraved woodblocks or from metal plates, and this is the opinion expressed by my friend Dr. Willshire,† who writes, "It is considered by some good authorities that not a few

* J. D. Passavant, "Le Peintre-graveur," Vol. I., page 131. Leipsic, 1860.

† "Introduction to Ancient Prints," Vol. I., page 57.

prints exist of which it is not easy to say whether they have been printed from wooden blocks or metal plates"; and it should be remembered that the method of procedure known as *engraving in relief* was, in early days, perhaps equally practised upon metal as upon wood.

A second edition of the "Meditationes" was printed by Hahn in 1472, but without the illustrations; a copy of this very rare work in the Spencer Library is described by Dibdin in his "Bibliotheca Spenceriana," Vol. IV., 791. It is the first printed Italian book in which use is made of signatures (*ante*, page 46). A third edition appeared in 1473, printed *per Uldaricum gallum alemanum et Simonem de luca*. The same illustrations were used as in the first edition, but the text was printed in a somewhat smaller type. A reprint of this 1473 edition was issued in 1478, but in this Simon de Luca's name does not appear. In 1479 an entirely new edition was printed by Numeister, who describes himself in the colophon as *clericus maguntinus* (Hain, *15726). Numeister had commenced as an assistant of Gutenberg, but had worked on his own account at Foligno from 1470 to 1472; at the time when he produced this edition of the "Meditationes de Turrecremata" he was printing in Mentz; and it is not improbable, as Dr. Lippmann suggests, that he had made preparations for this edition before he left Foligno, since the illustrations, freely copied as they were from the

cuts in the earlier edition, show an Italian rather than a Germanic influence. They are not, as the originals, entirely in outline with occasional black ground, but have shading, and in some of them landscape is introduced; they are also of smaller dimensions, and are surrounded with floriated borders. The type was set up and the work completed after the printer had returned to Mentz. Another, a reprint of the original edition, appeared in Rome in 1490, *Impresse per Magistrum Stephanum Planck de Patavia. Anno Domini M.cccc.yx.* There is an example of this reprint in the Library of the Vatican in which the cuts have been rudely coloured by hand. The final edition was issued in 1498 from the same press. The illustrations are copied, with variations, from the 1479 edition of Numeister, but are on a smaller scale and have different proportional dimensions; they are also of more artistic character and more delicate in their execution, have more elaborately designed ornamental borders, and show even more of the Italian influence.

In reference to Mr. Linton's remarks (*ante*, page 160), with regard to the "Valturius" (Hain, *15847), the work has an especial interest in that the character of the designs, unlike those in the earlier editions of the "Meditationes," shows a direct Italian influence, and not that of the German school; in the colophon the printer styles himself *Johannes ex Verona oriundus* and gives the date 1472. We

accept the work as the first book printed at Verona,* but it is not, as Mr. Linton suggests, the first dated book with woodcuts printed in Italy. Vte, Delaborde, in his "Gravure en Italie" (page 252), refers to an illustrated edition of "Valerius Maximus" (Hain, 15775), printed in Venice in 1471, *i.e.* a year earlier than the "Valturius." "On the recto of the third leaf," says Delaborde, "is a large ornamental letter, and another wood-engraving in the margin at the bottom, below the text, representing two winged children—two genii—upholding with their hands festoons of foliage. Between the children, at the foot of the shield which occupies the centre of the composition, are two rabbits at play."†

A copy of this work, at the sale of the Woodhall Library in London, January 1886, passed into the possession of the late Mr. Richard Fisher, a gentleman with whom for some years I had the pleasure

* In Hain's "Repertorium" (8787) is an entry of an edition of the "Homerus Batrachomyomachia," with the colophon *Verone die xv. Januarii: M.CCCC.LXX.* Hain no doubt derived his information respecting this book from Panzer, but it is presumed that the date 1470 does not refer to the year of the printing, but to the completion of the translation.

† I have not, unfortunately, availed myself of the opportunity of comparing the design described by Delaborde with a wood-engraving which appears in the lower margin of the "Eusebius" printed by Jenson in 1470, and of which Plate XV. is a reproduction. If the originals were impressed from the same block, it must have been borrowed by Vindelinius de Spira for his "Valerius." However that may have been, we must antedate the woodcuts in the "Valturius" by two years.

of a personal acquaintance. There is also a copy in the Trinity College Library.

The Duc de Rivoli, again, mentions three Venetian books, with woodcut ornamental borders, of earlier date than the "Valerius": an edition of Pliny, "*Secundus Historia Naturalis*," of 1469, printed by Johannes de Spira at Venice (Hain, 13087); a Livy, "*Historiæ Romanæ*," of 1470 (Hain, 10130), and a copy of the "*Bucolics*" of the same year (not recorded by Hain), both with the date and name of the printer—Vindelinius de Spira.

But if the "Valturius" may not be accepted as the earliest printed book with woodcut illustrations produced in Italy, it is by far the most interesting and important of such early books. As Dr. Lippmann says:—

It is a masterpiece of printing: its Roman types, harmonious if not absolutely correct in form, are impressed with beautiful regularity upon paper of magnificent strength and thickness; and the woodcuts which adorn the pages are not the least of its merits. The cuts are for the most part mere professional delineations of military engines; but the designs are so clear, and the lines drawn with such a bold and firm hand, that they strongly remind us of Leonardo's masterly sketches of similar objects. . . . The lines fall everywhere exactly in their true perspective; the corners form correct angles, sharply and clearly drawn.*

We have described books printed at Subiaco by

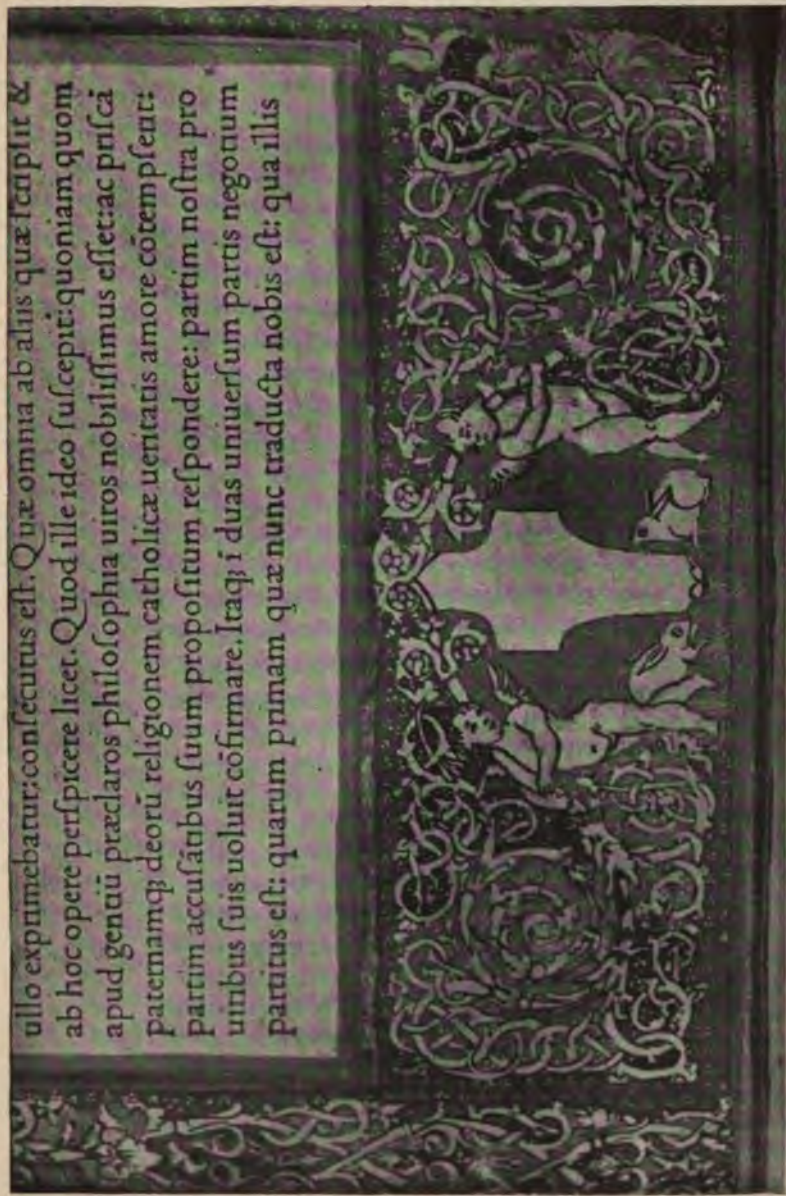
* There is a copy of this work in the Fitzwilliam Museum, another in the University Library.

Sweynheim and Pannartz, 1465 to 1467, as having been the earliest works produced by moveable type which appeared in Italy, and this decision has, we believe, been almost universally accepted. In my previous address we referred to a claim put forward, as early as 1471, on behalf of Nicolas Jenson, but founded on an erroneous statement in the Preface of an edition of the "Institutiones Quintiliani" (*ante*, page 109). A further argument has been adduced in support of the contention that the earliest Italian press was established in Venice, and that Jenson was the first printer. There is in the British Museum Library a book entitled "Decor Puellarum" (Hain, 6069), which on the final page bears the imprint ANNO A CHRISTI INCARNATIONE. MCCCCLXI. PER MAGISTRVM NICOLAVM IENSON, etc. If this date is correct, the work must by four years have preceded both the "Donatus" and the "Lactantius" which were printed at Subiaco in 1465. Of course it is quite within the bounds of possibility that the process of type-printing, which was already established in certain Northern towns, might have been introduced into Venice within a few years of its "invention"; but as no other dated book was issued by Jenson before 1470, and, as Mr. Gordon Duff remarks, from that date until 1480 "he printed continuously, issuing according to Sardini at least 155 editions, though this number must be considerably under the mark," it is hardly likely that, from

1461 to 1469, one work only, this "Decor Puellarum," should have proceeded from his press. We may therefore assume that the date which is given to this book must, as Hain suggests, have been a misprint for 1471, and that Jenson did not commence printing in Venice until 1470, when four works are recorded bearing his name and the date of their publication.

As a printer Jenson is remarkable, not only for the number of editions which in the short space of ten years proceeded from his press, but for the beauty of the Roman type which he continued to use until 1474, when he substituted a type of more Gothic form. Among his earlier books is a "Eusebius, Pamphili de Evangelica Præparatione," signed and dated 1470 (Hain, *6699), and of which a copy is in the Trinity College Library (Plate XV.). The latest printed book assigned to Jenson, as catalogued by Hain (Hain, 2284), is "Baldus de Ubaldis Commentaria," etc., which bears date 1487 *die 10 maii*; but as Jenson died some few years before 1487, the date of the year is evidently a misprint. His final work we believe to have been the "Boccaccio" dated M.CCCC.LXXX. *die 20 Mensis Septembris*, but it does not bear his name or that of the place of printing. I should add that in these ten years, 1470 to 1480, at least fifty printers had been at work in Venice; while twenty-one years later, *i.e.* in 1501, "more than two hundred Venetian printers

ullo exprimebatur: consecutus est. Quæ omnia ab aliis quæ scripsit &
 ab hoc opere perspicere licet. Quod ille ideo suscepit: quoniam quom
 apud gentiū præclaros philosophia viros nobilissimus esset: ac præcā
 paternamq; deorū religionem catholicæ veritatis amore cōtempserit:
 partim accusatibus suum propositum respondere: partim nostra pro
 viribus suis voluit cōfirmare. Itaq; i duas uniuersum partis negotium
 partitus est: quarum primam quæ nunc traducta nobis est: qua illis



From Page of Book Printed by Jenson at Venice, 1470.

had been recorded, and about three thousand editions of books." *

The first book printed in Venice, 1469, was the "*Cicero Epistolæ Familiares*," issued from the press of Johannes de Spira, so called from his native place, Spire on the Rhine. In reference to Spira an interesting record has been preserved, to the effect that the Venetian Senate, on September 18, 1469, granted him a certain monopoly of printing for five years. Whether this privilege was a general one, or was intended to secure his copyright in works he had already issued, is somewhat uncertain. Dibdin, on the authority of Panzer, says that the privilege was thus limited, and with this conclusion I am inclined to agree. We know that in the following year, 1470, Valdarfer, who had temporarily established his press in Venice, issued a "*Cicero de Oratore*," and that Nicolas Jenson printed a "*Cicero Rhetorica*" and the "*Epistolæ ad M. Brutum*." Surely we may assume that Johannes de Spira would have known that his rivals were preparing for publication some of the works of the great Latin orator, and therefore it was he sought to secure the copyright in that which he had himself produced. Perhaps we hardly realize the popularity, in those early days, of the writings of Cicero; we say nothing about works in manuscript, but Hain catalogues

* Hawkins, "First Books and Printers in the Fifteenth Century," page 27.

some three hundred reprints or editions printed before the close of the fifteenth century, the list occupying nearly forty pages of the "Repertorium," and the larger part of these were printed in Italy. Spira died in 1470, and his copyright lapsed—we do not know whether in the earlier or later part of the year—but before his death he had issued the first part of the "Augustinus de Civitate Dei" (Hain, *2048). This work, as we read in the colophon, was completed by his brother, Vindelinus de Spira, who apparently succeeded to his business, and for some eighteen years continued printing in Venice.

It would have been a pleasant task, if our time permitted, to enter more fully into the character of the illustrations introduced into early Italian books, and tell of the first commencement of printing in the more important Italian towns; but this I must leave for some future "Reader." I would, however, like to add a few words in regard to what I believe to have been the earliest instance of the insertion of engraved woodblocks within the lines of type, to be inked and printed from by the same process and at the same time as the rest of the page on which they would be impressed. The work in which these xylographic impressions are found was issued from the press of Sixtus Riessinger, the first to introduce the art of printing into Naples.

Sixtus Riessinger, an ecclesiastic probably of the Augustine Order, migrated from Augsburg in Germany, *circa* 1469—1470, and established a press at Naples under the patronage of King Ferdinand I. He would have acquired his knowledge of the process of type-printing under the guidance of Gunther Zainer, who founded the earliest printing press at Augsburg, and who there in 1468 produced his first dated book, the "Meditationes Christi" (Hain, *3557). Zainer was, as Riessinger, connected with some monastic Order, and, though I cannot find direct evidence in support of my conclusion, I am inclined to believe that both these printers were members of the fraternity known as the "Fratres Vitæ Communæ." *

The first book issued from the Naples press was a work in two parts, ending *Explicit lectura supra Codice Edita per Dominum Bartholum Saxoferrata . . . Anno M.CCCC.LXXI. . . . Parthenope* (Naples) *impressit . . . SIXTVS RIESSINGER* (Hain, 2540). A second work, bearing no date, but believed to have been printed in the same year, the "Tractatus Societatis," is that which contains the small woodcuts to which we have referred.

* Mr. Pollard, in his "Early Printed Books," page 51, says that Zainer was "connected in some way with the monastery of the Chartreuse at Buxheim." This does not disprove our contention, since we know that the "Brethren of the Common Life" were affiliated to more than one of the religious Orders, and were entrusted with the work in the Scriptorium.

I first met with this book in the library of the Collegio Romano. The description in Hain is very imperfect, and, as Dr. Kristeller suggests, it is not certain whether it can be identified with his No. 15887 or his No. 15902. The work is in folio, in two columns of fifty-three lines. The three woodcuts occur in the second column on the recto of folio 28. The upper one is the familiar device emblematic of Mount Tabor, surmounted by a cross—a design assumed, with variations, by more than one member of the Roman ecclesiastical hierarchy as an armorial bearing, and occurring as a frequent watermark in Italian-made paper. Between this and the design below, a shield, are eight lines of text, with further three lines below the shield, and then a sword; five more lines of text complete the page. I am satisfied, from careful examination of the original, that these three designs were, as I have said, printed at the same time and by the same process as the text which occupies the page. The designs are of very simple character, inserted to illustrate the accompanying text, and have little interest for us beyond the fact that they are, as I think, the first examples of what has long been an ordinary practice.

You have honoured me with so much kindly attention, may I say a few words more before I conclude?

I have endeavoured in this series of lectures to place before you, as shortly and as accurately as I can, some account of the successive steps which led to what is usually termed the "Invention of Printing," that is, the production of books by means of moveable type.

To this end, having referred to the early practice of engraving upon metal and upon wood, I accorded a prominent place to the production of designs of a religious character, executed upon wood, perhaps in some instances upon metal, for the distinct purpose of producing impressions by some process of printing, assigning their introduction to the later fourteenth and the earlier fifteenth centuries. I next spoke of the blockbooks—xylographic works composed not of single but of successive sheets of illustrations, accompanied by appropriate or descriptive text, the earlier examples entirely printed from engraved blocks. I then drew your attention to the fact that the more interesting and more important of these Helglein and blockbooks show, in the character of the designs and also in the manner of their execution, if not the hand, yet the direct influence of the early Flemish school; and from evidence afforded by manuscript lettering in two of these books—the second edition of the "Exercitium" and the work known as the "Spirituale Pomerium"—drew what we may regard as reasonable inference, if not absolute proof—which in almost every question which relates to the invention

of printing appears to be impossible—that not only these particular works, but others to which they bear apparent relationship, were designed and executed within the precincts of certain religious houses, whose inmates were designated “*Fratres Vitæ Communæ*,” an Order which in those days took a leading part in all matters connected with literature and education. We have also asserted that of these religious houses the most prominent position must be given to the Priory of Groenendael, in the near neighbourhood of Brussels.

I contend that there is reasonable ground for the assumption that the blockbook known as the “*Speculum Humanæ Salvationis*” was produced within this priory. The Brethren had issued books of like character, for which there was an increasing demand. Another was projected: it was intended, like the others, to have been produced entirely from engraved woodblocks, but while the work was yet in hand, and when the illustrations and twenty pages of the text had been completed, it occurred to some one or other of the intelligent and practised wood-engravers employed in its construction that the text might be more easily and advantageously produced by the substitution of single stamped or incised letters, which could be rearranged, and again and again used in the formation of further pages; that the idea, once entertained, was carried out, an entirely new departure was the result, and instead of continuing to engrave the text

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upon the block, the whole remaining pages were set up in manufactured metal type.

Thus there was no actual "invention," in the literal meaning of the word; the process of printing by means of moveable and separate types was not entirely what we should regard as a discovery. It was the natural outcome of ideas such as will always occur to experienced workmen, who find their tools inefficient, and the results they desire to produce more or less unsatisfactory. That the art should for a while remain, in one sense, a secret, that its future possibilities should not at once be recognized, and that continued efforts should be resorted to to extend its use is not at all surprising. It is demand which creates supply, and the demand was at first limited. The dayspring of type-printing, and its educational results, were then but in their earlier dawn. How rapidly the newly devised process extended we perhaps hardly realize: by the close of the fifteenth century it is supposed that some two hundred and fifty presses were established and hard at work in European towns; while the issue of printed books—*we do not mean volumes, but different published works*—which appeared before the commencement of the sixteenth century amounted, some say, to more than twenty, others believe more nearly to thirty thousand!

It is then to the Brethren of the Common Life, and to the craftsmen in their employ, that we may

unhesitatingly ascribe what is termed the "Invention of Printing." We believe that they not only originated the practice, but they carried it forward in several of the towns of the Low Countries and in Germany. It is true that their designation, "Fratres Vitæ Communæ," does not appear in the colophon of the earlier printed books, but that does not disprove our contention: hundreds of books are catalogued in Hain to which no name of the printers is attached; his list, alphabetically arranged, of works printed before the close of the fifteenth century, works which bear no name of year or place or printer, fills twenty-three closely printed pages of his "Repertorium"; the name of Gutenberg never appears in the colophon of any book which we may assign to his press, but we should not decide for that reason that he never printed. Later on we know that the Brethren had established presses, and that more than one distinguished printer, as, for instance, Ulrich Zell, were members of the fraternity.

As regards others to whom the discovery has been assigned, I have ventured to declare that Laurens Coster was never even heard of until, more than a hundred years after type-printing was first practised, a Dutch biographer published his imaginative essay; while, as regards Gutenberg and his successors or contemporaries—Gutenberg to whom learned bibliophiles have attributed the sole honour of the discovery,

Fust and Schoeffer from whose press proceeded some of the finest printed early works produced in Mentz—we may say that, while we withhold from them the credit of the invention, we recognize the talent they displayed in so quickly carrying forward the art to its perfection.

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